CONTROLS OF SE 16

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This note gives a list of part of the hardware to be ordered or constructed for the SE 16 computer control system.   It results from the discussions which we have had with the persons involved in hardware production and/or maintenance.

Timings (Daems)

To be ordered:

    1 crate with 15 prepulse units plus 1 preset counter for master pulse

    1 crate with 15 post-pulse units plus 1 preset counter for master pulse

    1 crate of 16 preset counters

    1 test unit.

Power supplies Tekelec (Grüber)

To be ordered:

    1 SAAS 1x16 memories (12 bits ADC)

    STAR acquistion: 5 words STARA needed from one data group

    STAR control: 1 word STARC from master distributor

To be constructed

    1 crate for interface between STAR and control units of the power supplies.

Function generator (Bosser)

To be ordered

    1 control panel

1 analogue multiplexer with three output channels

1 digital transmission system between VARIAN and function generator unit in MCR

4 special channels of VARIAN are reserved

Display of generated functions requires an oscilloscope.

Beam loss monitors (Millich)

16 special beam loss monitors are to be installed.   10 should be ordered.

Also to be ordered:

1 SAAS 4x16 memories (12 bits ADC)

To be constructed

1 multiplexer 4x(4 inputs, 1 output) controlled by STARC for analogue display on console

Toposcopes (Steinbach)

It has recently been decided to use toposcopes instead of miniscanners for the magnetic septa of SE 16.   5 toposcopes (4 horizontal, 1 vertical) will be produced.

Each toposcope requires:

16 integrators

16 analogue memories

1 analogue multiplexer

1 coaxial cable for analogue transmission to MCR

The system of toposcopes requires:

1 control unit

1 analogue multiplexer controlled by STARC

1 SAAS 4x16 memories (12 bits ADC).

Ripple detection (Shering)

The sampling device exists already with two inputs, one normally used for spill low frequency structure detection and one which we intend to use.

We need:

     1 multiplexer controlled by STARC (8 inputs, 1 output)

     8 adapters to treat the voltage signal from the power supply before feeding it into the sampler.

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Distribution

E. Asséo
O. Barbalat
S. Battisti
H. van der Beken
J. Bosser
L. Burnod
D. Bloess
D. Brahy
G. Daems
D. Dekkers
J. Grüber
C. Guillaume
C.D. Johnson
W. Kubischta
J.H.B. Madsen
J.J. Merminod
G. Plass
G. Shering
P.H. Standley
C. Steinbach