Programming Instructions for Dynamic Test Use of the Multiplier

The following program should be set up on the multiplier and its associated accumulators. The multiplier should be programmed to perform a 10 place multiplicating and divide both the multiplier and multiplicand accumulators, with all other switches set to off - except as indicated otherwise in the table. The time program pulse coming from the multiplier should be fed to an accumulator repeat program control, and thence to the input of the multiplier program control. This accumulator should be set up to do a program pulse at every addition time desired for sampling or unblanking the oscilloscope. The output pulse from the multiplier program control should be fed to an accumulator repeat program control, and thence to the input of the multiplier program control. This accumulator should be set up to do a program pulse at every addition time desired for sampling or unblanking the oscilloscope. The output pulse from the multiplier program control should be fed to an accumulator repeat program control, and thence to the input of the multiplier in programmed repeatedly with an interval of at least one addition time between multiplications so as to allow various transient.

The program pulses used to stimulate the multiplier program are numbered as follows: The program pulses used to stimulate the multiplier program are numbered as follows: The program pulse coming from the multiplier and multiplicand accumulators is called the clock pulse, as it paces the speed of the entire addition time. The program pulse coming from the first addition time is referred to as the number 1 program pulse, etc.

Each set of such numbers generated by cases, appearing in the speed column, refers to the program pulses. That is, it means that the sequence with the number 1 program pulse is the one of the first addition time, the number 2 program pulse is the one following the first addition time, etc. The number 13 program pulse, coming at 17-20 or 13-0 may be used, actually the pulse is stimulated every pulse time by the 19th pulse (not from the oscilloscope unblanked by the number 12 program pulse and blanked by the number 13 program pulse. The oscilloscope unit PA-5-1001 and the oscilloscope unblanked by the number 12 program pulse and blanked by the number 13 program pulse. The oscilloscope unit includes sweep time, 2 to 10 msec sweep with 9 different speeds.

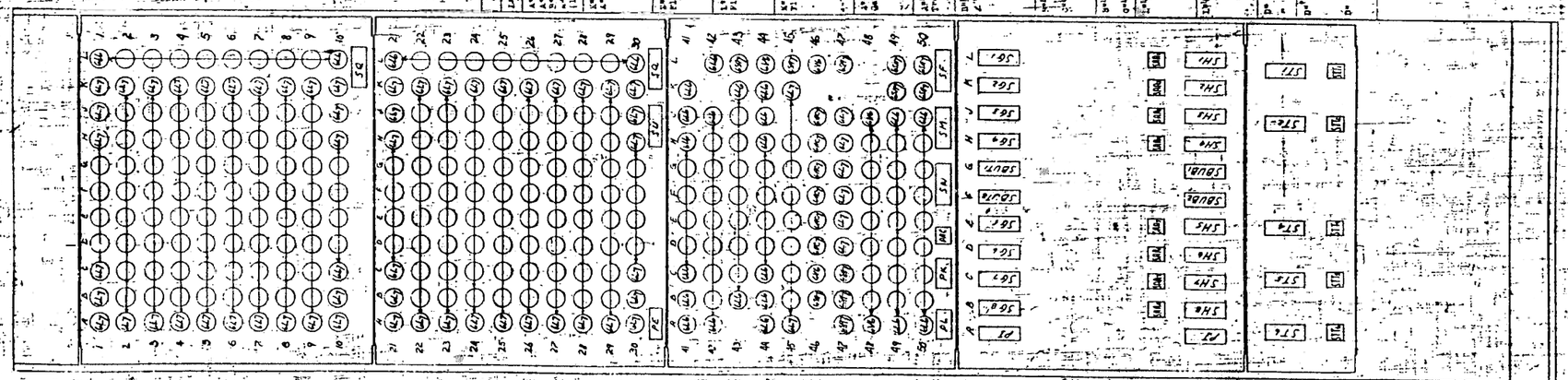
A single number, or set of numbers separated by dashes, appearing in the speed column, refers to the pulse length. In the case of a pulse the time specified in the speed column is the time by which it should rise (or fall) within 30 microseconds after the pulse leading edge. In the case of a pulse the time, duration, and fall time are specified in microseconds.

Pulses should be set up so that the rise (or fall) within 30 microseconds following the number 12 program pulse. 5-20 means that it should rise (or fall) within 30 microseconds after the pulse leading edge. In the case of a pulse the time, duration, and fall time are specified in microseconds.

Pulses should be set up so that the rise (or fall) within 30 microseconds following the number 12 program pulse. 5-20 means that it should rise (or fall) within 30 microseconds after the pulse leading edge. In the case of a pulse the time, duration, and fall time are specified in microseconds.

The signal to be tested is connected from the digital tube. This one, in most cases, should that be plotted (Tektronix, analog receiver) to drive the digital tube.

Tube	Terminal	Speed	Amplitude	Pulse	Duration	Fall	Notes
1	1	2-5 to 2-12	+95				
		14-20 to 13-14	-95				
1	2	0-13	-40	30-150	----	18-150	The significant figures written in control are as follows:
		1-2 to 1-12	-95				
1	3	12,13	+95	12-100	----	15-100	
		12-19	+40				
			-40				
1	4	13	+40	72-50		18-50	
		/8-20	+95				
			-95				
1	5	13-19	-95				
			-95				
			+95				
			-95				
1	6	12,13	-95	12-100	----	13-100	
		18-19	+40				
			-40				
1	7	12-19	+95				
			+40				
1	8	11-19	+95				
			-95				
1	9	11-16	+95				
			-95				
1	10	8,16	+40	8-100	----	18-100	Multiplier and multiplicand must be negative
		11-19	+40				
			-95				
1	11	11-19	+95				
			-95				
1	12	8,16	+40	2-150	----	16-150	Multiplier and multiplicand must be negative
		11-19	-40				
			-30				
1	13	8,16	+40	2-150	----	16-150	Multiplier and multiplicand must be negative
		11-19	-40				
1	14	13-19	-95				Pulse all product diagonal contacts as
			+95				4, for pads, 2487, pdg
			+95				5, for pads, 2487, pdg
			-95				4A, for pads, 2487, pdg
			-95				5A, for pads, 2487, pdg
							5C, for pads, 2487, pdg
							4BC, for pads, pdg



MOORE SCHOOL OF ELECTRICAL ENGINEERING
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MULTIPLIER TESTING CHART - PANEL 3 - (DYNAMIC)

MATERIAL	FINISH	SCALE
—	—	1/4 FULL SCALE

Drawn by:	Checked by:	Approved by:	
JLP Jan. 12, 1945	H. W. S.		PX-6-129