

Memorandum M-2337

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Division 6 - Lincoln Laboratory  
Massachusetts Institute of Technology  
Cambridge 39, Massachusetts

SUBJECT: CIRCUIT APPLICATION MANUAL

To: N. H. Taylor, R. A. Nelson, Group 62 Section  
Leaders and a vellum copy to W. Jackman at IEM  
via Kromer.

From: Arthur Heineck

Date: August 3, 1953

Introduction:

Initial entries in the Circuit Application Manual will be distributed during the third week in August. This note is to familiarize engineers with the contents of the manual.

Contents of the Circuit Application Manual:

The Circuit Application Manual will have four main divisions:

- 1.00 Introduction
- 2.00 Summaries of Characteristics of Basic Circuits
- 3.00 Summaries of Characteristics of Special Circuits
- 4.00 Methods of Interconnecting Circuits

Basic circuits are those circuits used throughout the machine, such as flip-flops and gate tube circuits. Special circuits are those circuits used in only one section of the machine, such as magnetic memory digit plane drivers and drum read circuits.

The circuit summaries, as much as possible, will follow this outline:

- A. Logical Definition
- B. Block Symbol

- C. Input Characteristics
  - 1. Pulse Requirements
  - 2. D.C. Input
  - 3. Loading Presented to Driver
- D. Output Characteristics
  - 1. Output Pulse
  - 2. D.C. Output
  - 3. Load that can be Driven
- E. Physical Layout
- F. Circuit Schematic
- G. Parts List
- H. Waveforms
- I. Power Requirements
- J. Marginal Checking Procedure

The section on methods of interconnecting circuits has not been well formulated yet. A format for this section will probably become apparent as more interconnecting problems arise and are solved.

Classification of Entries:

Each circuit summary is referred to as an entry in the manual. These entries will be stamped Tentative (or Provisional) and Approved. Tentative means that the information is the latest available and that the circuit should be used wherever needed with the understanding that future changes may have to be made. Approved means that the Central Standards Committee and R. Everett (as Lincoln Laboratory representative) are satisfied that no further changes are needed in the circuit.\*

Signed: A. Heineck  
A. Heineck

Approved: C. Watt  
C. Watt

AH:tl

\* See M-2305 Approval of Basic Circuits