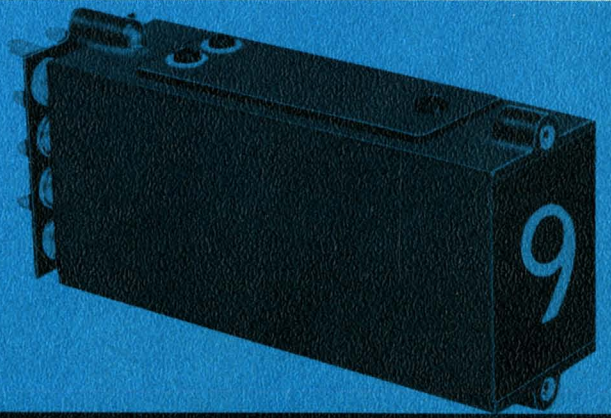
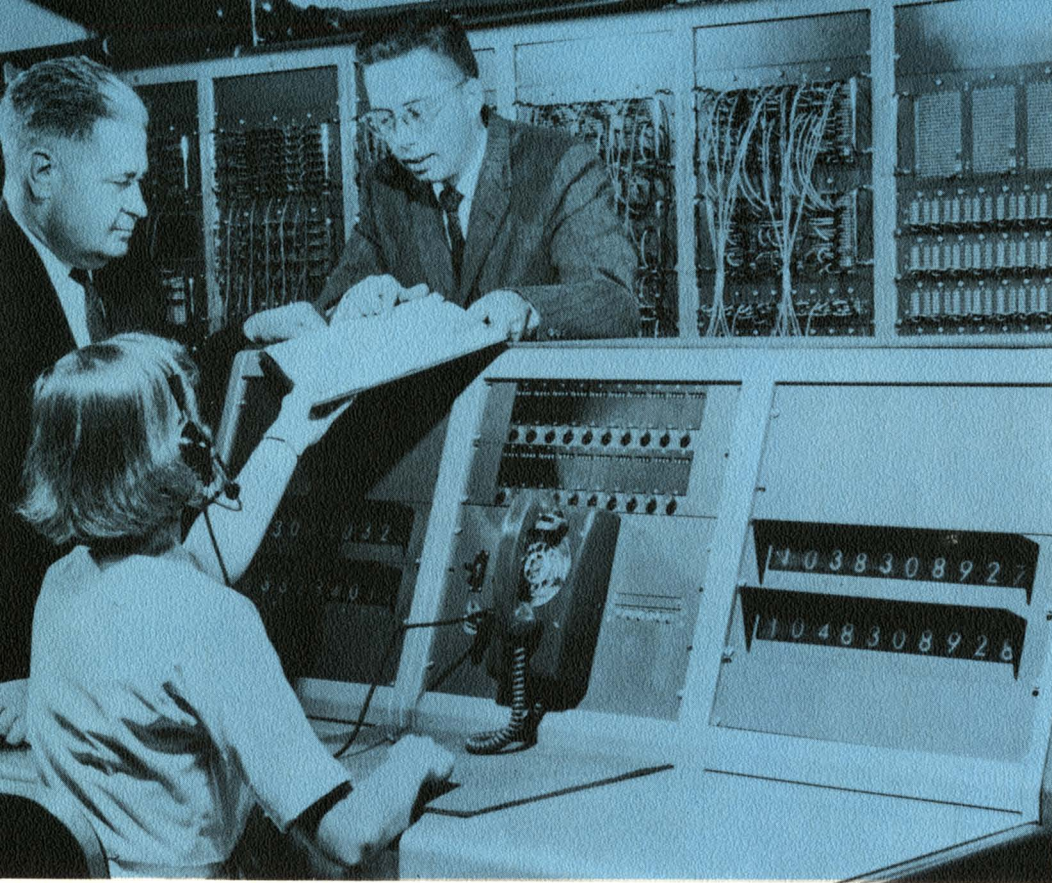


industrial electronic engineers, inc. ENGINEERS AND MANUFACTURERS • COMPONENTS • INSTRUMENTS ■ 5528 VINELAND AVE., NORTH HOLLYWOOD, CALIF.

ONE - PLANE

IN-LINE READOUTS



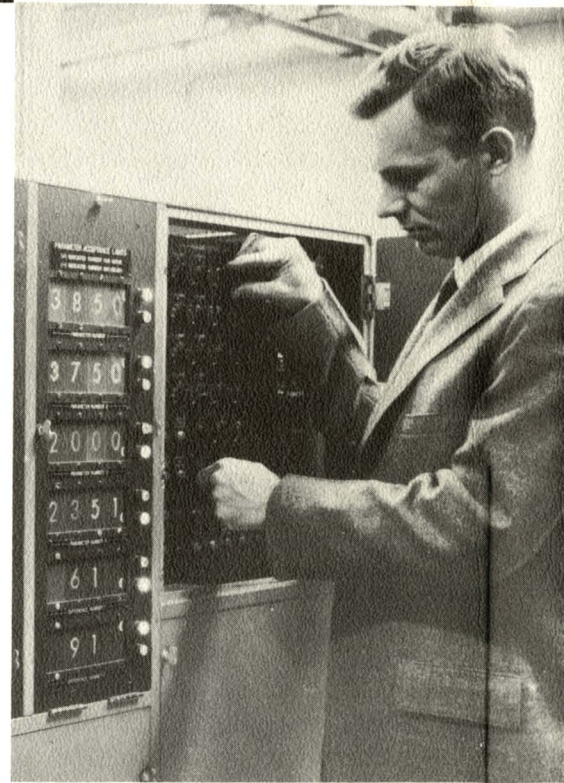


● *The state of the art of computer technology has advanced to a stage where readout devices with the capability of only displaying numbers can no longer meet all readout applications in this field.*

Recognizing this trend a few years ago IEE designed a readout with a versatility that is unmatched in displaying words, numbers, symbols and colors in any combination. Success of these readouts has been spectacular, and they are now used by thousands of leading firms all over the world, not only in computer applications but in a variety of readout uses ranging from coin machines to Astro-chimp teaching machines.

Today, the IEE line includes not only the finest readouts made, but a variety of sophisticated electronic components, including decoders, combination decoder-readouts, and indicator switches.

If you can't find the best way to meet your readout requirements in the following pages, please contact us. We'll gladly build it. We've been building the best for years.

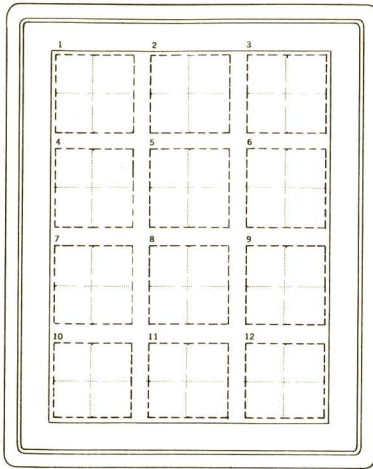




READOUT-MESSAGE DESIGNER'S KIT

tracing sheet & character specification for status indicator

ACTUAL SIZE



STATUS INDICATOR SERIES 280

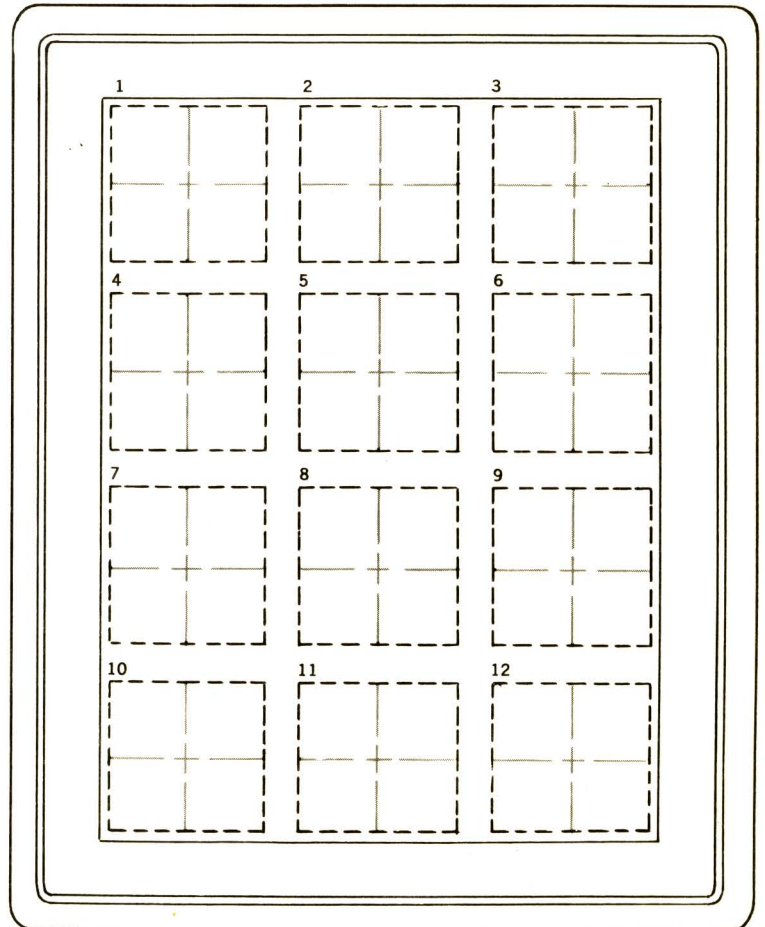
Actual size of unit. Adjacent message areas may be combined in any combination to form larger displays. Light separators between indicated areas will be removed by factory if any areas are combined, so that complete illumination of the enlarged area will be provided. Unit may be mounted vertically or horizontally.

Message Position	Character Height	Character Color	Background Color
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

Special Instructions: _____

INSTRUCTIONS FOR USE:

1. Place outline drawing of actual size unit over type sample sheet and select type sizes to fit desired area or areas.
2. Pencil in the message for each area on the enlarged display below. Each message area has an individual lamp. If two or more message areas are combined to form one display, all lamps behind the larger area will be used to illuminate that display. If necessary write across dotted lines so that message fills up all required areas, if more than one area is used for display.
3. Page may also be turned horizontally and messages indicated for horizontal mounting of unit. (Rotate page clockwise.)
4. Film messages may be numbers, letters, words, symbols, and colors; they may be white or colored messages on black backgrounds or black messages on white or colored backgrounds; color film is also available for multi-color displays.
5. Fill out table at lower left. If you are providing your own displays on mylar or parchment paper, indicate under "Special Instructions" what message areas will be used and if any will be grouped together to form one display.
6. For message displays engraved on viewing screen, consult factory.



VIEW LOOKING AT FRONT OF UNIT FOUR TIMES ACTUAL SIZE
(Dotted lines indicate 12 individual message areas; any adjacent areas may be combined to form larger displays.)

Date: _____ By: _____

Signature

Title

Company Name and Address: _____

Refer to P.O. # _____



READOUT-MESSAGE DESIGNER'S KIT

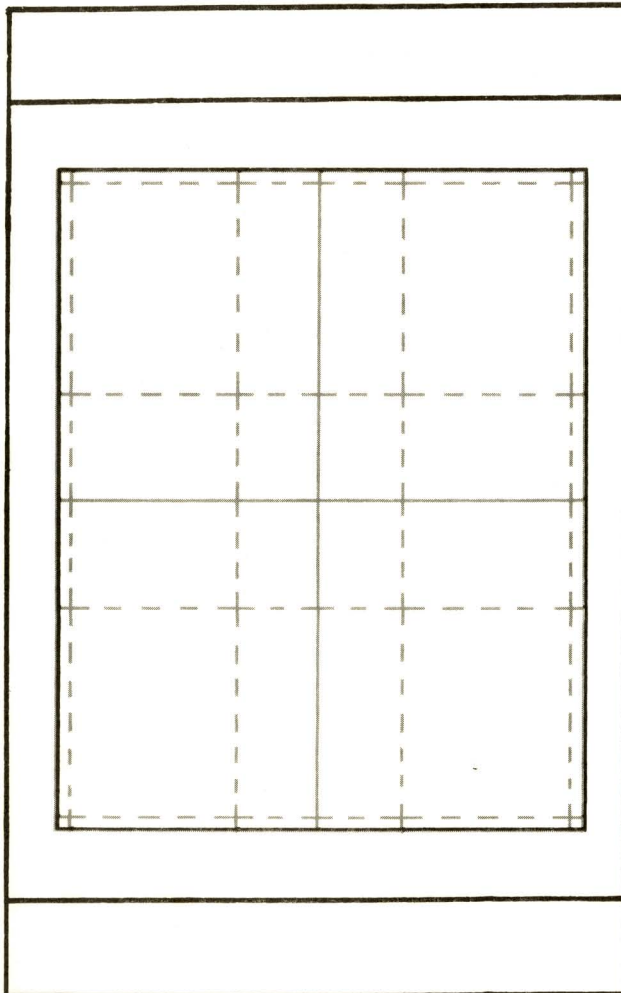
tracing sheet

INSTRUCTIONS FOR USE:

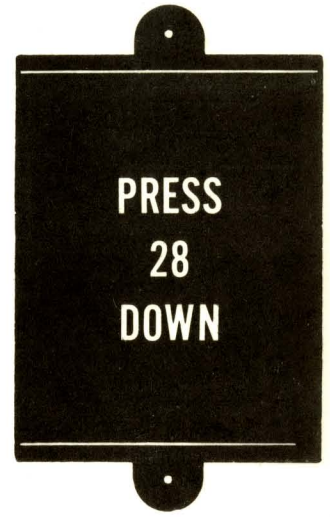
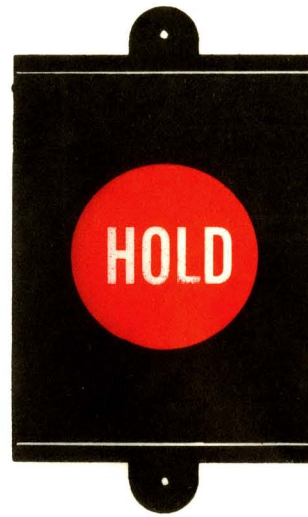
Instructions—For single lamp sample message (Numbers, symbols, and colors also available):

1. Select desired readout outline drawing.
2. Count number of characters in your longest message.
3. Center guide lines on tracing sheet over desired type sample.
4. Count number of characters to be sure message will fit. (All letters except "I", "M", and "W" are approximately the same width.)
5. Trace actual message by sliding type sample to appropriate letters. (Use adjacent letters as guide for spacing.)
6. Color indication can be obtained by shading around letters with a colored pencil.

On Terminal Sheet, indicate desired messages for all 12 lamps.

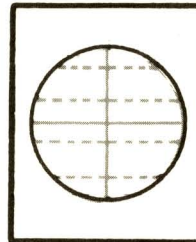


SERIES 80

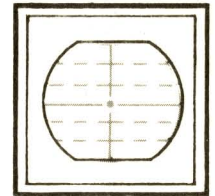


Typical readout message using color. (Can be obtained by using one lamp for color and a second lamp for message.) One lamp can produce black letters on a colored background.

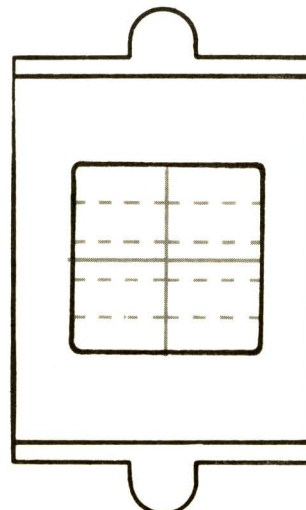
Typical readout message using one lamp to indicate upper word, second lamp for center number, and third lamp for lower word. Also one lamp can be used to produce all 3 words.



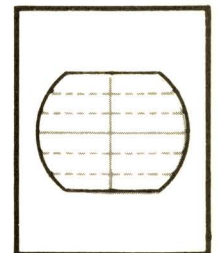
SERIES 220



**SERIES CSD
CUE INDICATOR
SWITCH**



SERIES 10



SERIES 120



READOUT-MESSAGE DESIGNER'S KIT

terminal sheet

INSTRUCTIONS FOR USE:

1. Determine message that should appear for each of 12 lamps.
2. Pencil in words, numbers, colors, and symbols on appropriate terminal spaces corresponding to your electrical circuitry.
3. Indicate desired IEE readout series.
4. Indicate desired lamp by number.
5. Fill out table below.
6. IEE reserves the right to interchange terminal positions to arrive at the best possible display, unless otherwise instructed.

Terminal Number	Character Height	Character Color	Background Color
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

IEE Readout Series: _____ Lamp No. _____

TERMINAL 1	TERMINAL 2	TERMINAL 3
TERMINAL 4	TERMINAL 5	TERMINAL 6
TERM. 13	TERMINAL 7	TERMINAL 8
TERMINAL 10	TERMINAL 11	TERMINAL 12
		TERMINAL 9
		TERM. 14

Position of terminals when looking at readout from rear. Indicated message will appear on screen when voltage is applied to lamp. For wiring purposes, the common ground is located at terminal 13 or 14 on the Series 10, Series 120 and 220 and at terminal 11 on the Series 80. Units are also available with separate grounds for each lamp. Terminal numbers on this sheet are for reference only and do not necessarily appear on the actual unit in all series.

Special Instructions: _____

Date: _____ By: _____

Signature

Title:

Company Name and Address: _____ Refer to P.O. # _____



READOUT-MESSAGE DESIGNER'S KIT

sample type sheet & message height finder

Studies indicate that Alternate Gothic #3 type face is the most readable for multiple letter readouts; therefore, this type face is furnished as standard except as noted below. Other type faces, sizes and symbols are available on special order.

Alternate Gothic #3
ABCDEF GHIJKLMNOPQRSTUVWXYZ 1234567890

Futura Medium
ABCDEF GHIJKLMNOPQRSTUVWXYZ 1234567890

Futura Medium Condensed
ABCDEF GHIJKLMNOPQRSTUVWXYZ 1234567890

Futura Demibold
ABCDEF GHIJKLMNOPQRSTUVWXYZ 1234567890

To provide optimum size and readability, these exceptions are made:

- Series 10** — Futura Medium style type is supplied for single maximum height (15/16") numbers only.
Futura Medium Condensed style type is supplied for single maximum height (15/16") letters only.
- Series 120** — Futura Demibold style type is supplied for single maximum height (5/8") numbers & letters only.
- Series 220** — Futura Demibold style type is supplied for single maximum height (5/8") numbers & letters only.
- Series 80** — Futura Medium Condensed style type is supplied for single maximum height (3/8") numbers & letters only.
- Bina-View** — Futura Medium style type is supplied for single maximum height (1 3/8") numbers. Futura Medium Condensed style type is used for multiple numbers, single or multiple letters.

*Indicates standard heights available for each series. (Nominal dimension only; standard tolerance for characters less than .500 is ± .015" and for characters .500 or over it is ± .025")

280	BINA-VIEW	80	10	120	220	Height Inches
*			*	*		.105
*			*	*		.125
*			*	*		.140
*			*	*		.168
*			*	*		.180
*			*	*		.210
*			*	*		.220
*			*	*		.250
*			*	*		.264
*			*	*		.280
*			*	*		.300
*			*	*		.320
*	*	*	*	*		.340
*	*	*	*	*		.365
*	*	*	*	*		.384
*	*	*	*	*		.408

**Indicates maximum heights for single characters for each series. Actual letters not shown for these sizes.

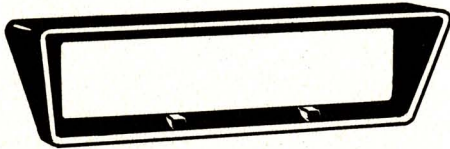
ABCDEF GHIJKLMNOPQRSTUVWXYZ
 ABCDEF GHIJKLMNOPQRSTUVWXYZ
 ABCDEF GHIJKLMNOPQR
 ABCDEF GHIJKLMNOP
 ABCDEF GHIJKLMNOP
 ABCDEF GHIJKLM
 ABCDEF GHIJKLM
 ABCDEF GHIJKL
 ABCDEF GHIJKL
 ABCDEF GHIJKI
 ABCDEF GHIJ
 ABCDEF GHIJ
 ABCDEF GHI
 ABCDEF GH
 ABCDEF G
 ABCDEF G
 ABCDEF G

Combining display areas in 280	BINA-VIEW	80	10	120	220	Height Inches
*	*				*	.445
*	*	*	*	*	*	.464
*	*	*	*	*	*	.530
*	*	*	*	*	*	.590
*	*	*	*	*	*	.625
*	*	*	*	*	*	.635
*	*	*	*	*	*	.715
*	*	*	*	*	*	.9375
*	*	*	*	*	*	.985
*	*	*	*	*	*	1.375
*	*	*	*	*	*	3.375

ABCDEF G
 ABCDEF
 ABCDEF
 ABCDE
 ABCDE
 ABCDE
 ABCDE
 ABCD
 ABCD
 ABC

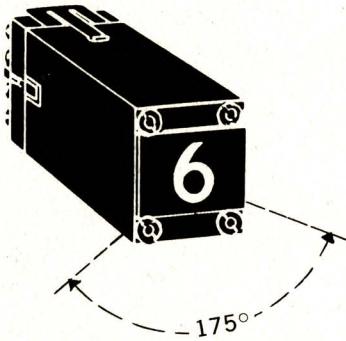
accessories

front panel bezel



Finished in dull black for assemblies of Series 20000, Series 130000 and Bina-View readouts. When ordering, specify the type and number of display units the bezel is to frame.

V-1 wide angle viewing screen



The standard screen provides satisfactory visibility up to an angle of 80° from center, or a total included angle of 160° . The V-1 wide angle screen provides satisfactory visibility up to an angle of $87\frac{1}{2}^\circ$ or a total included viewing angle of 175° . V-1 is optional at no extra charge.

color film

Color film is available for multi-color projections from a single lamp, to produce full colored backgrounds for characters or multi-colored pictures or symbols.

special lamps and adapters

IEE makes available the G. E. sub-miniature 327,328,330 lamps for use in the standard miniature bayonet base socket by the use of a simple two piece adapter. These adapters permit convenient use of normal in-plant stock or readily available miniature bayonet base socket in many situations where current requirements or other design characteristics indicate the use of sub-miniature lamps.



industrial electronic engineers, inc.

5528 VINELAND AVENUE, NORTH HOLLYWOOD, CALIFORNIA • PHONE TRIangle 7-1144 • TWX N HOL 8383

