

# ENCODER

**PLECTRON**

**G8  
MODEL**



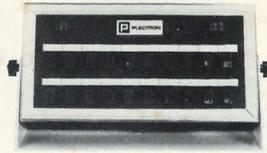
- MULTIPLE REMOTE CAPABILITY
- FAST SEQUENCE—INSTANT ALERT
- ALL SOLID STATE
- MIXED TIMING
- SINGLE BUTTON ACTIVATION
- AUTOMATIC KEYING
- MANY OPTIONS AVAILABLE

## TRANSMITTER/ENCODER



MG21

G22  
REMOTE HEAD



**PLLECTRON, INC.**  
 85 W. Michigan Ave.  
 P.O. Box 8845 - Ph. 422-5664  
 Orlando, Fla. 32806

LIGHTED HEAD



G5

G22



For additional information on Plectron's complete line of Encoders pictured, request Form #567-1-72.

For information on the Transmitter/Encoder—a compact and complete nerve center for controlling and monitoring remote equipment electronically, please request Form #679-10-74.

## SPECIFICATIONS AND OPTIONS FOR PLECTRON TRANSISTORIZED ENCODERS

### GENERAL CHARACTERISTICS:

Solid state; all silicon transistors, integrated circuits. Frequency and timing circuits all electronic with no motors, cams, solenoids, power handling relays, or complex switch assemblies. Computer type solid state switching and very low power circuitry result in all components being operated at unusually low stress levels for long trouble-free life. The only moving parts in the system are the spring-loaded, normally open, single-contact activating pushbuttons and magnetically-driven, hermetically-sealed dry reed relays in the "Keying" and "Audio" lines. Single button operation on all models and automatically keyed transmitter. All incorporate monitoring speakers, separate control for volume and modulation adjustment and a switch for testing the calibration of the tone frequencies.

### REMOTE CAPABILITY:

All models can be remotely controlled at distances up to 5 miles from the base. Low current, internally supplied 10 VDC lines supply all required keying power. Up to 5 remote control points may be paralleled without affecting performance by simply adding remote control heads.

Model G8—For more than one control head or at a distance of 500 feet from the encoder, an auxiliary lamp driver assembly and source of 117 VAC will be required if status indicator lamps are needed. The Model G21 requires the auxiliary lamp driver assembly and a source of 117 VAC for any remote application requiring status indicator lamps.

### STANDARD MODELS:

**G8D** Single tone and Duotone mixed. Up to 10 single tones and up to 100 Duotone combinations. Mixed timing and automatic reversal options available to double capacity at minimum cost. Other models similar to the G8 are available on special order providing any combination of up to 30 first or second tones giving a capacity of up to 430 individual codes.

**G21A, G22A** Single tone—1 to 4 tones.

**G21C, G22C** Duotone—1 to 4 tone combinations/first tone common.

**G21B, G22B** Same as G21C except second tone common.

The dry reed "Keying" relay has fully isolated contacts and the audio line to the transmitter is similarly isolated by a set of dry reed contacts which completely disconnect the audio output of the encoder from the transmitter when the encoder is not being operated.

Modular construction provides unusual flexibility for system changes or expansion. Model G8 has plug-in tone and timing networks which may be individually preset for the exact tone durations and frequencies required. Existing systems may be modified or expanded by obtaining preset nets from Plectron. Many options on this line are also available in a form permitting their addition at a later date as system requirements change.

The model G21 tone nets are supplied on individual preset

boards which may be easily wired in to add or change tones and timing may be varied by changing fixed resistors which are identified on the printed circuit boards and in the manual. Model G8 has variable timing adjustments with 2:1 range.

Model G8 is a basic two-piece system with all circuitry incorporated in the main chassis which may be desk, wall, or floor mounted, as required. Operation controls, status indicator lamps, and clear button to cancel tone should wrong tone be selected, are contained in a separate control head connected to the main chassis by a cable and separable connectors. All switches, lamps, and associated components are mounted on a removable panel which is readily adaptable to incorporation in a control console.

### PERFORMANCE SPECIFICATIONS

Model G21 is supplied as a completely self-contained unit designed for desk or table top operation. It has the same remote heads which may be plugged into a receptacle at the rear of the chassis.

### POWER SUPPLY:

G8-100-130VAC, 60 cycles, 10 watts maximum. Fully regulated for line and load changes. (With slight modification may be supplied to operate from "12-volt" emergency power supply, DC generator, vehicle 12V system or standby battery system).

G21—Same as above except requires only adapter cable for use with DC supply of 11 to 16 volts.

G22—11-16 VDC negative ground only. (Positive Ground optional).

### OPERATING TEMPERATURE RANGE:

—30 to +60°C within published specifications on all characteristics.

### FREQUENCY STABILITY:

Better than  $\pm 0.5\%$  for all combinations of line voltage and temperature.

Better than  $\pm 0.2\%$  for normal temperature ranges of indoor environment. (+10 to +40°C, +50 to +104°F).

### OPTIONS:

**G8—Automatic Audible Alarm:** Swept siren effect following alerting tone sequence. Timing may be any predetermined interval from 1 to 6 seconds with 2:1 built-in adjustment range. Intermittent alarm also available (Standard on G21 and 22).

**Manual Audible Alarm:** G8 only—As above but manually controlled to allow calling out a number of squads without delay of waiting for the alarm sequence. Alarm may be manually transmitted after squad or group calls are completed.

**Dual Transmitter Keying:** G8 only—Permits use of encoder to key and modulate two transmitters simultaneously.

**Extra Remote Heads:** May be supplied with or without POWER ON and ACTIVATING lamp units as required. (Use of this

feature at remote points enables dispatcher to determine when system is being used from other control centers). Remote head also available for G21.

**Automatic Holdoff:** Permits activation of a selected input from a telephone relay, Gamewell Alarm, or similar repeating device. Code is sent once, then the encoder is prevented from activating for a predetermined period of time which can be adjusted to any time from 10 seconds to 3 minutes. (Also available on G21).

**Automatic Reverse Tone Sequence:** G8 only—to provide added codes by simple addition of extra buttons and internal diodes.

**Mixed Timing:** G8 only—Permits the user to take advantage of the short response time of fast Duotone devices while not obsolescing older equipment used for existing groups.

**Automatic Alarm Cancel:** G8 only—Permits transmission of tones with or without automatic audible alarm depending on wiring of individual buttons. Codes used for sirens or control purposes may be sent without the alarm while those for alerting personnel can include this function.

**MG21—Mobile version of G21.** Mobile mounting bracket and cable assembly standard equipment. (For use in mobile installations where encoder may be mounted in a convenient location as a single unit).

**G22—Mobile version (11-16VDC only) of G21 but with a separate remote head for under dash mounting.** Main chassis can be located under seat, trunk, etc. Seventeen feet of cable and connecting plugs are standard on the G22 model for connecting remote head to main chassis.

### FINISH:

G8, G21 and G22—Black chassis with grey shell wrap. All with durable polatex finish.

### SIZE:

**G8—Main Chassis—**12½" x 3¼" high x 9" deep. (Height includes feet. Fits standard 3½" rack panel with feet removed).  
**Remote head—**20 button model—10" wide x 3¼" high x 3¾" deep. (Removable panel is 9¾" x 4-5/32" and requires 2 inches clear space behind mounting surface). 50- and 100-button heads also available.

**G21—**8½" wide x 3¼" high (including feet) x 9½" deep.  
**G22—**10½" wide x 3¼" high (including feet) x 9½" deep main chassis.

**Remote head—(G22 only)—**7" wide 5¾" deep 2½" high, includes mounting bracket.

### WEIGHT:

**G8—Main chassis—**5 to 8 lbs. depending on options.  
**Remote head—**2½ lbs. with 6-foot cable normally supplied (20-button standard).

**G21—**6 lbs.

**G22—**6 lb. + 1 lb. for remote head.

for further information write or call:



**PLECTRON CORPORATION**

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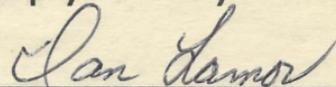


**Thank you for your interest in . . .**

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The attached literature will give you the information you requested. Should you have further questions about your specific requirements, please do not hesitate to contact us.

If you would like a demonstration of the Plectron Equipment, or the name of your nearest dealer, we will be happy to comply with your request.



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**SALES MANAGER**