# Home Nurse Call System



**NC-20**

- Instant Alarm
- Signaling Device
- Self Contained
- Local Alarm and Flashing LED
- 2 Form C Relays
- Microprocessor Controlled
- Low Battery Indicator

# HOME NURSE CALL SYSTEM

- Instant Alarm
- Signalling Device
- Self Contained
- Local Alarm and Flashing LED
- 2 Form C Relays
- Microprocessor Controlled
- Low Battery Indicator



**NC-20**
**NC-21 Instant On**

**APPLICATION:**
The NC-20 Series is designed as a signaling device for use as a self contained Home Nurse Call System. The GRI Model NC-20 will sound a local alarm and flash an LED indicator, should anyone press the supplied (GRI CB-20) Call Button. The GRI NC-20 is also equipped with a form C relay output connections for use with external signaling devices.

**DESCRIPTION:**
The GRI Home Nurse Call System uses a microprocessor to monitor the open loop momentary push button (Call Button), the reset/cancel button, the supply voltage and provides control for sounder, LED and relay outputs. The Nurse Call System is set to alarm the instant the Call button is depressed. The sounder will continue to sound until the reset/cancel button is depressed. Other features for the NC-20 would include an adjustable sounder volume, power/alarm LED indicator, low battery indicator and (2 form C relay) contacts for control of external devices.

The NC-20 and NC-21 have two form C relay contacts that will close or open on alarm for signal output. On the NC-20, once the alarm sounds, you will have a 60 second delay before tripping the relays so the caregiver has time to reset the alarm before the other device such as security control, phone dialer or remote sounder is triggered. On the NC-21 the alarm sounds and the relays trip, so the caregiver can respond as soon as the button is pushed. This allows for other devices to be tripped, such as remote sounder, light or control panel in another location to inform the caregiver of the patient's needs. This gives you two options; 60 second delay with the NC-20 and instant on with the NC-21 to interface with up to two other devices at the same time as needed.

GEORGE RISK INDUSTRIES, INC.
G.R.I. PLAZA
KIMBALL, NE 69145

MADE IN U.S.A.

TOLL-FREE 1-800-445-5218
TOLL-FREE 1-800-523-1227
(308) 235-4645
FAX (308) 235-3561
E-MAIL: grisales@megavision.com
WEB SITE: www.grisk.com

# HOME NURSE CALL SYSTEM

## INSTALLATION WIRING DIAGRAM

For Multiple Call Buttons

If more than one Call Button is used, the switches should be connected in parallel as in Figure 1.

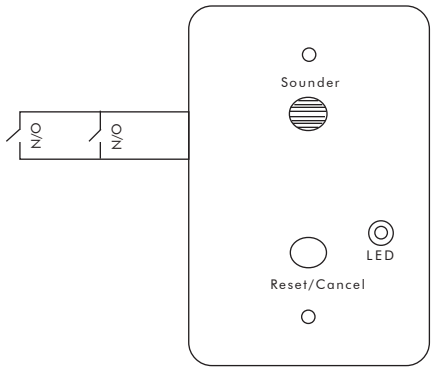
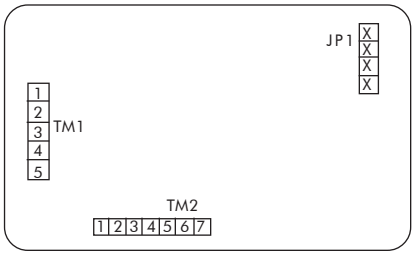



Figure 1. Wiring Diagram

Figure 2. Terminal Connections & Jumpers




**TERMINAL TM1**
1. External Power (+)
2. Ground
3. Remote Reset/Delay Switch
4. Call Button -
5. Call Button +

**TERMINAL TM2**
1. Relay N/O
2. Relay Common
3. Relay N/C
4. Relay N/O
5. Relay Common
6. Relay N/C

**Sounder Volume Control JP-1**

| | |
|---|---|
| X X | Full Volume |
| X X | |
| X X | 3/4 Volume |
| X X | |
| X X | 1/2 Volume |

It is suggested applied voltage not exceed 15 VDC and surge protection, such as the GRI CS-1 Current Sensor, be used between the power supply and all GRI Low Voltage Alarms using external power.

NOTE: Unit will function at minimum 5VDC at a very limited sounder volume. This power level is considered total battery failure.

**SPECIFICATIONS:**

| | |
|---|---|
| Battery Type | Standard 9 Volt |
| Battery Life | Approximately 3-6 months |
| External Power | 9 to 12 VDC |
| Max. Input Power | 40 mA |
| Recommended External Power Supply | 12V DC 500 mA Regulated Output |
| Low Bat Mode | 6.5V DC |
| Sounder Rated | 85 dB at 10 Ft. (3.5 M) |
| Switch | Open Loop |

**Relay Contacts**

| | |
|---|---|
| Nominal Switching Capacity | 2A 30 VDC |
| Max Switching Power | 60 Watts |
| Max Switching Current | 2 Amps |

**WARRANTY**: One year against workmanship, material and factory defects.

## CONTACT YOUR G.R.I. DISTRIBUTOR OR CALL:

GEORGE RISK INDUSTRIES, INC.
G.R.I. PLAZA
KIMBALL, NE 69145

TOLL-FREE 1-800-445-5218
TOLL-FREE 1-800-523-1227
(308) 235-4645
FAX (308) 235-3561
E-MAIL: grisales@megavision.com
WEB SITE: www.grisk.com

MADE IN U.S.A.

BA-224 Rev B 4/18/2008