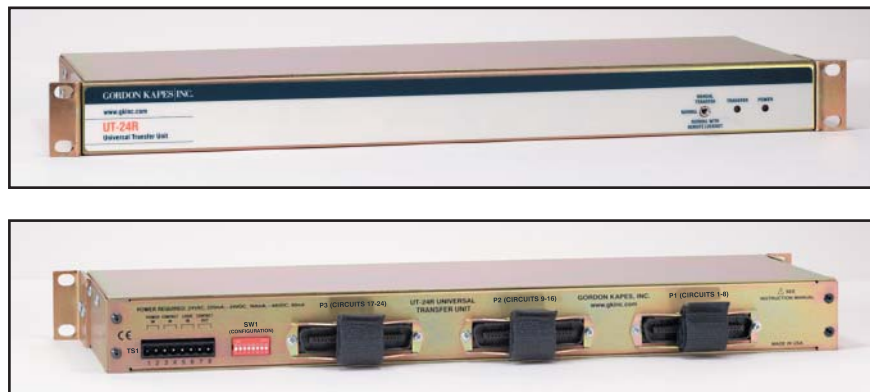


## UT-24R Universal Transfer Unit



The UT-24R Universal Transfer Unit is designed as a general-purpose switching device for use with telephone, data, and low-power electrical signals. The unit is arranged as 24 two-wire circuits. Each circuit has an input, a normal output, and a transfer output. The two wires of each circuit are designated as tip and ring, reflecting the telephony orientation of the UT-24R.

UT-24R features include 24 circuits of transfer, two LED status indicators, a manual transfer switch, an auxiliary relay contact, a return to normal mode delay timer, and universal powering. Also included are provisions for a normally open, normally closed, or logic level signal to control the operating mode. The unit is completely self-contained in a cabinet that can either be rack or wall mounted. Interconnections are made using standard 25-pair telephone-type plugs and a terminal strip. This method provides simple, time-efficient installation and maintenance.

The UT-24R Universal Transfer Unit is intended to serve as a useful “building block” for special applications. Up to 24 two-wire input pairs can

be switched between the normal and transfer outputs. The switching is done “metallically” using electromechanical relays. This method provides excellent AC and DC isolation between connected and uncommitted circuits.

A typical application would be with two-wire telephone circuits. These circuits could include loop start trunks, ground start trunks, auto ring-down circuits, and private lines. Because the UT-24R is configured to transfer 24 independent pairs, four- and six-wire E&M circuits, four-wire leased lines, and other special circuits can be connected.

Data lines that do not require special shielding can be switched by the UT-24R. A prime example would be 10-BaseT local area network cabling. A normal and emergency routing scenario could be created, with the UT-24R providing the switching.

The UT-24R can also be considered as a giant A/B switch, with 48 individual inputs connecting to 48 normal and transfer outputs. Low-power control signals can be switched between normal and emergency equipment.

## **UT-24R Universal Transfer Unit Specifications**

**Transfer Circuits:** 24, 2-wire (“tip and ring”) pairs

Arrangement: each circuit has three pairs (six leads) associated with it: an input pair, a normal pair, and a transfer pair

Switching Method: sealed bi-furcated electromechanical relays, break-before-make

Contact Rating: 0.5 amperes maximum, 60 volts AC or DC (resistive)

### **Contact Input:**

Compatibility: connected contact must be capable of handling 5 milliamperes at 40 volts DC; contact inputs on multiple UT-24R units can be bridged (connected in parallel)

Operating Modes: switch selectable for normally open (not shorted) or normally closed (shorted)

### **Logic Input:**

Compatibility: connected signal must provide minimum logic high current of 2 milliamperes. Logic input current is limited via a 1000 ohm resistor in series with the logic input’s optical coupler. If sufficient logic current is available, logic inputs on multiple UT-24R units can be bridged (connected in parallel).

Operating Modes: switch selectable for normally high logic (“+5 volts”) or normally logic low (“0 volts”)

### **Return to Normal Delay Timer:**

Time Interval: One to 15 minutes, selectable in one-minute increments

Accuracy:  $\pm 1\%$ , nominal, of selected time interval

### **Status Relay Contact Output:**

Type: normally open (not shorted)

Contact Rating: 0.5 amperes maximum at 60 volts AC or DC (resistive)

### **Interconnections:**

Transfer Circuits: three 25-pair plugs (male). Installer must supply three 25-pair connectors (female).

Power, Contact Input, Logic Input, and Status Relay: pluggable terminal strip, 0.2-inch (5.08 mm) contact centers

Mating Connector (included with UT-24R): PCD Connector part number ELFP08210

### **Power Requirement:**

24 volts AC, nominal, 220 milliamperes maximum

–24 volts DC, nominal, 160 milliamperes maximum

–48 volts DC, nominal, 80 milliamperes maximum

Acceptable range for above voltages –10/+15%.

For AC operation use Class 2 power transformer only, minimum 10 VA rating

### **Dimensions:**

19.00 inches wide (48.3 cm)

1.72 inches high (4.4 cm)

6.9 inches deep (15.3 cm)

**Mounting:** one space of a 19-inch rack or to a wall surface

**Weight:** 4.7 pounds (2.1 kg)

Specifications and information contained in this data sheet subject to change without notice.