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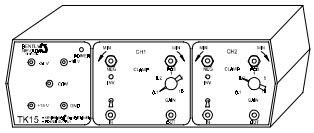
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Find the *GE / Bently Nevada TK15* at our website: *Click HERE*

**Specifications and Ordering Information**

# TK15 Keyphasor® Conditioner and Power Supply



## Description

This two-channel instrument is used to power transducers and condition transducer signals for use with portable machinery diagnostic instruments. Applications include:

- Obtaining a Keyphasor® signal
- Pre-recorded transducer signals
- Transducer Power

## Specifications

**Power Requirements**

| | |
|---|---|
| *Input Voltage:* | 95 to 125 Vac or 190 to 250 Vac (Switch selectable on rear panel). |
| *Input Frequency:* | 47 to 63 Hz, single phase. |
| *Fuse Ratings* | |
| *115 Vac:* | 0.5 A, 250 V, (time-delay). |
| *230 Vac:* | 0.25 A, 250 V, (time-delay). |

**Outputs**

*+15 Vdc*

| | |
|---|---|
| *Nominal Voltage:* | +16.2 Vdc ±1.2 Vac. |
| *Maximum Current:* | 150 mA (100 mA if one optical pickup is used, 50 mA if two optical pickups are used). |
| *Maximum Ripple:* | 1 mV pp. |

*-18 Vdc*

| | |
|---|---|
| *Nominal Voltage:* | -18.9 Vdc ±1.2 Vdc. |
| *Maximum Current:* | 300 mA. |
| | **Note:** The sum of -18 Vdc supply current and -24 Vdc supply current should not exceed 350 mA. A typical Proximitor® will consume 12 mA. |
| *Maximum Ripple:* | 1 mV pp. |

*-24 Vdc*

| | |
|---|---|
| *Nominal Voltage:* | -24.2 Vdc ±1.5 Vdc. |
| *Maximum Current:* | 350 mA. |
| | **Note:** The sum of -18 Vdc supply current and -24 Vdc supply current should not exceed 350 mA. A typical Proximitor® will consume 12 mA. |
| *Maximum Ripple:* | 1 mV pp. |

**Signal Conditioning**

*Transducer Input*

| | |
|---|---|
| *Input Impedance:* | 100 k Ω. |
| *ac Coupling:* | Time Constant = 0.2 seconds.<br>Filter Corner Frequency = 0.8 Hz. |

*Optical Pickup Input*

| | |
|---|---|
| *Typical LED Current:* | 50 mA. |
| *Maximum Photo-detector Operating Voltage:* | 20 Vdc. |

*Conditioned Signal Output*

| | |
|---|---|
| *Output Impedance:* | 249 Ω, short circuit protected. |
| *Dynamic Voltage Range:* | ±10 volts minimum. |
| *Clamp Range:* | ±10 volts minimum. |

*Input to Output*

| | |
|---|---|
| *Gain Accuracy:* | ±3% maximum over temperature. |
| *Slew Rate:* | 1.5 Vdc per micro-second minimum. |
| *Bandwidth:* | 0.8 Hz to 30 kHz minimum. |

**Environmental Limits**

| | |
|---|---|
| *Operating Temperature:* | 0°C to +50°C (+32°F to +122°F). |
| *Storage Temperature:* | -40°C to +85°C (-40°F to +185°F). |
| *Relative Humidity:* | To 95% noncondensing. |

**Physical**

*Size*

| | |
|---|---|
| *Height:* | 89 mm (3.5 in) |
| *Width:* | 221 mm (8.7 in) |
| *Depth:* | 305 mm (12.0 in) |
| *Weight:* | 3.1 kg (6.8 lb) |

## Ordering Information

**TK15 Keyphasor® Conditioner and Power Supply**
**80917-01**
**Option Description**

*Includes:*

- **1** TK15 Keyphasor® Conditioner and Power Supply
- **1** User Guide
- **1** Power Cord
- **1** Fuse for 230 Vac Operation (Unit is shipped with fuse for 115 Vac operation installed.)

## Accessories

| | |
|---|---|
| **73783-02** | TK16 Keyphasor® Multiplier/Divider |
| **10798-03** | Optical pickup with integral cable and manual. |
| **20545-XX** | Extension cable (for optical pickup)<br>**XX** = cable length in 1-foot increments.<br>**Minimum length:** 10 ft (3 m).<br>**Maximum length:** 99 ft (30 m). |
| **81769-01** | Reflective Tape, 4.6 metres (15 feet) (used for optical pickup targets). |
| **20211-05** | Optical Pickup Mounting Package. |

## Application Diagrams

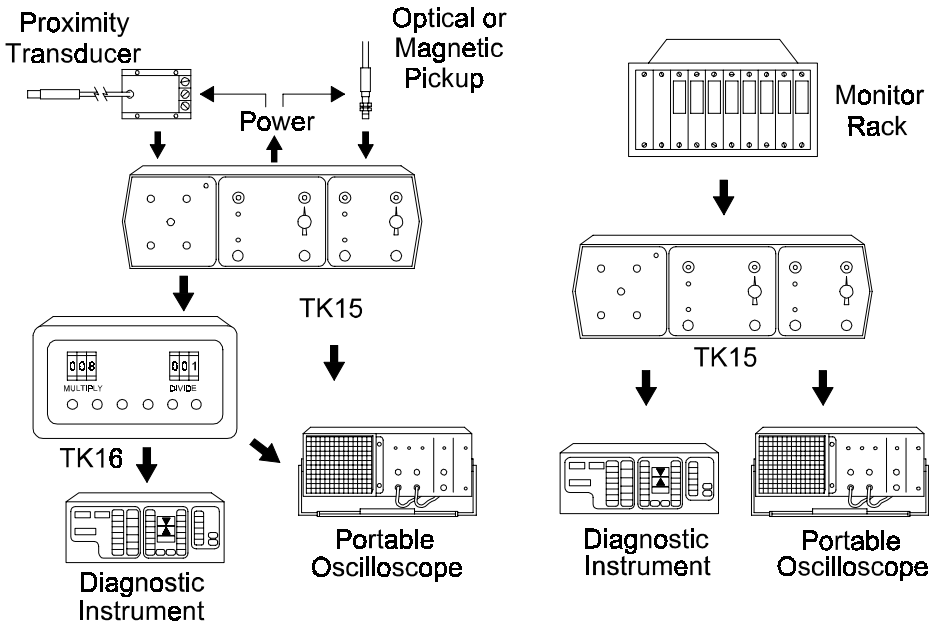
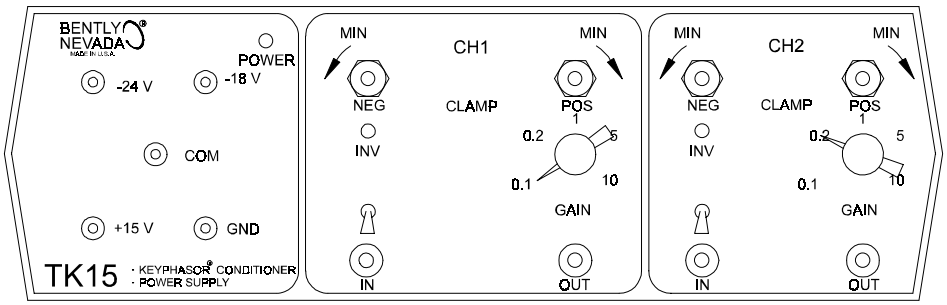



**Figure 1: Typical Uses**



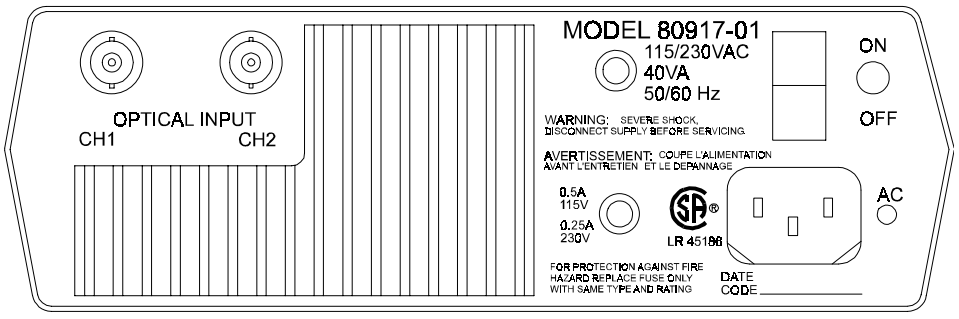




**Figure 2: Front and Rear Connections**

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