UE SYSTEMS INC.

THE ULTRAPROBE 201

GREASE CADDY MANUAL
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OVERVIEW

COMPONENTS OF THE UP201 GREASE CADDY KIT

- Ultraprobe 201 “Grease Caddy”
- “Grease Caddy” Ball
- Grease Gun Docking
- Magnetic Transducer (RMT)
- Grease Gun Mounting Clamp
- Adjustable Ball Mount
- Charger

- Hard Hat Head Phones: To be connected & worn at all times while using the UP201 “Grease Caddy”
COMPONENTS ASSEMBLY INSTRUCTIONS

1. Attach the Ultraprobe 201 Grease Caddy A to the grease gun, using Clamp B.

2. Connect cable from Sensor Assembly to input of Grease Caddy.

COMPLETED ASSEMBLY
DISPLAY OF THE UP201 GREASE CADDY

METERED HOUSING

A. **On and OFF buttons.** To turn the instrument ON, push the ON button in. Once pressed the instrument will stay on and then automatically turn off after 5 minutes (this will extend the battery charge and active use of the instrument). To turn the instrument OFF before 5 minutes have elapsed, press the OFF button.

B. **Bar graph Display.** The display consists of a ten segment LED bar graph that will indicate ultrasonic signal strength. A low number of LEDs indicate a low level of ultrasound. Conversely more intense ultrasonic signals will display more LEDs.

C. **Battery Level Light.** This red light turns on only when the batteries need to be recharged.

D. **Sensitivity Selection Dial.** There are eight (8) sensitivity levels which read out in related decibels of "0" to "70". As the dial is turned to the right, to "0", the sensitivity of the instrument increases. As the dial is turned to the left, to "70", the sensitivity decreases. A low-level ultrasound emission produces low amplitude. To detect low-level ultrasounds, the instrument should be in a high sensitivity position. 0 is the highest sensitivity position. For higher amplitude signals, move the sensitivity to the left towards "70".

E. **“Phones” Jack.** This is where you plug in the headphones. Be sure to plug it in firmly until it “clicks”.
HEADPHONES

The headphone plugs into the “Phones” jack.

**NOTE:** Always use the headphones when operating the Ultraprobe 201 Grease Caddy. Should inspections be performed in areas where both hard hat and hearing protection is required, these headphones are for both hard hat use and for use in high noise areas. These heavy-duty headphones are designed to block out intense sounds often found in industrial environments so that the user may easily hear the sounds received by the ULTRAPROBE 201. There is a 25 dB attenuation from outside noises that meet most single hearing protection requirements.

FRONT

A. Guide Light: When the unit is on, the guide light automatically is on to help users see in dark locations.

B. RAM Connection.

C. Recharge Jack.
USERS GUIDE

ULTRASONIC CONDITION-BASED LUBRICATION

- Be sure the grease coupler is securely connected to the grease fitting and that the magnetic sensor, (RMT) is in full contact with the bearing housing.
- Wear your headphones and be sure the head phones are plugged into the headphone jack.
- Turn the Ultraprobe 201 ON.
- If the sound is too loud, reduce the sensitivity: turn the Sensitivity Dial LEFT until the LED’s are at approximately 50% of scale.
- Apply the lubrication and listen.
- If the bearing needs lubrication, the user will notice a gradual drop in amplitude as lubrication is applied.
- Once The Amplitude Falls Back To The Baseline Or Levels Off, The Bearing Is Sufficiently Lubricated.

NOTE: If the amplitude increases, that means there is already enough lubricant and it is now being over-lubricated. Even if ultrasound finds no change in decibels after adding grease, that is still actionable information. The inspector can follow up with a spectrum analysis of the recorded ultrasound sound file, vibration analysis or some other technique to determine why there was no change in the decibel level. Always refer to Manufacture’s suggested lubricant amount when in question.
SPECIFICATIONS

| **Housing** | Attaches directly to the grease gun, gives visual & audible indication for proper lubrication |
| **Construction** | Aluminum Housing |
| **Circuitry** | SMD/Solid State heterodyne receiver |
| **Transducer** | Piezoelectric (Acoustically isolated from Grease Gun) |
| **Frequency Response** | Peak response: centered around 38 kHz |
| **Indicator** | 10 segment LED bar graph (red) |
| **Sensitivity Selection** | 8 position precision attenuation |
| **Power** | Rechargeable nickel metal hydride |
| **Power Off** | Time delay |
| **Low Battery** | LED |
| **Indicator** | Weight: 2.5 Oz. Operating Temp. Range: 32° to 140°F (0° to +60°C) |
| **Headset** | Cable: 48” shielded. Meets or exceeds ANSI specifications and OSHA standards for hearing protection. Over 23 dB of noise attenuation. |

| **Ambient Operating Temperature Range** | 32° - 140°F (0° - 60°C) |
| **Relative Humidity** | 10 - 95% noncondensing at up to 86°F (30°C) |
| **Storage Temperature** | 0° - 130°F |
| **Dimensions** | 5.5" x 2.65" x 1.25" (13.3 x 6.7 x 4.5 cm) (LWH) |
| **Weight** | 16 oz. (45 kg) |
| **Warranty** | one year, parts/labor |

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CONTACT:

UE Systems, Inc. 14 Hayes Street, Elmsford, NY 10523 USA

T: 914-592-1220  |  E: info@uesystems.com  |  W: www.uesystems.com