

## Operation

1. Tip installation: Simply screw the dedicated tip onto the handset front. Make sure the tip matches the connector type you want to inspect. **(In order to keep the optics inside the handset clean, make sure that the tip to be installed is clean.)**
2. Insert the tip into the connector adapter housing until the adapter stops the movement. Adjust the focus by rotating the wheel on the handset as shown in Fig. 5.



Figure 5

3. A clear image of the connector end face can be obtained.

## Battery Charging

When the battery indicator LED shows 'low' (orange color), the battery should be recharged. (A battery pack can still support operation for >15 min from the point when the 'Battery low' indicator becomes on.) Steps for recharge:

1. Plug the pigtail connector of the Charger to the monitor module, and turn the switch to 'CHARGE'. (See Fig. 6)
2. While charging, the 'LED on the charger' is *red*; once the battery is full, the 'LED on the charger' will turn to *green*. It takes 3.5 hours to charge from battery 'empty' to 'full'.

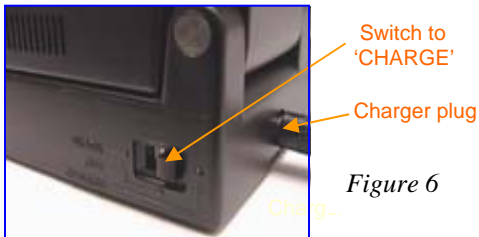


Figure 6

**Note: During charging, the monitor does not operate.**

If you prefer an external charging, you can buy an external charging housing and additional battery packs from Lightel.

## Tips

The standard package includes a tip for LC/PC female connectors and a tip set for FC/PC & SC/PC female connectors.

Options include

- Tips for other types of female connectors; and tips for male connectors
- Slim tips (0° or 90°) for applications with tight access.

## Warranty

Lightel Technologies Inc. products are shipped after passing a final inspection by Lightel's Quality Assurance program. In case of any failure due to a manufacturing error or an accident occurring during transportation, please contact Seikoh Giken Sales Department at (770) 279-6602 or email [sales@sg-usa.com](mailto:sales@sg-usa.com)

The warranty period is **one year** (except the battery pack) after the date of delivery. Should a failure whose cause has proven to be an existing manufacturing process occur within one year, repair or replacement shall be made as necessary free of charge. Warranty will not be honored for:

1. Failure caused by usage non-conforming to the instruction manual or negligent operation.
2. Failure caused by an unauthorized electric or mechanical modification by the customer.
3. The extent of the warranty shall be limited to delivery of a substitute unit.

## Safety Information

- Never power on if any defect is observed.
- To reduce the risk of injury and instrument damage, use only the specified battery packs.
- Always follow the polarity sign of the battery pack when inserting it into the monitor module or the external charging housing.
- Do not disassemble the handset. Any unauthorized attempt will void the warranty.
- To reduce the risk of electric shock, unplug the AC adapter and the charger from the outlet before attempting any maintenance or cleaning.

# CI-1000 Connector Inspector User's Manual



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## Standard packages

	CI-1000-A2 (LCD version)	CI-1000-B (USB version)	CI-1000-C (Handset version)
Handset	√	√	√
LCD monitor set	√		
Tip set for female FC/PC or SC/PC (1 tip body, 1 FC guide, 1 SC guide)	√	√	√
Tip for female LC	√	√	√
USB video capture device & software		√	
CI-1000 interface cable (w/ an F-M RCA converter attached to its RCA port)			√
Rechargeable battery pack	√		
Switching charger / Power adapter	√		√
Carrying case	√	√	

## Specifications

Magnification	400x (w/ 9" monitor)
Field of Vision	~ 400 μm x 300 μm
Focus	Manual adjustment, 2mm max travel
LCD Monitor	3.5"; TFT-LCD; 960(H) x 234(V)
Monitor Module	Foldable (105mm x 90mm x 45mm when closed); Brightness / Contrast adjustable
Handset Size	∅32mm x 175mm (without a tip)
Power Supply	9.6V battery packs (last 4 hours) or AC (using AC adapter)
Operation Temp.	0 °C ~ 50 °C
Adapter Tips	Full line of custom optional tips: - Regular tip family - Slim tip family (straight or 90° angled)
Other	CE approved

## Setup

### CI-1000-A (LCD version)

1. Plug the handset cable connector into the socket on the back of the monitor module (refer to Fig. 1).
2. **If you use battery power:** A 9.6V battery pack is inside the base of the monitor module. When the battery is charged, the 'Work / Battery low' Indicator LED shows *green*. But if the battery becomes low, the LED color turns to *orange*. (See section 'Battery Charging' for battery charging details.)

**If you use AC power:** Plug the cable connector of the AC Adapter (i.e. the Charger) into the socket as shown in Fig. 1. *Once this AC adapter is plugged in, the battery is disconnected from the system.*

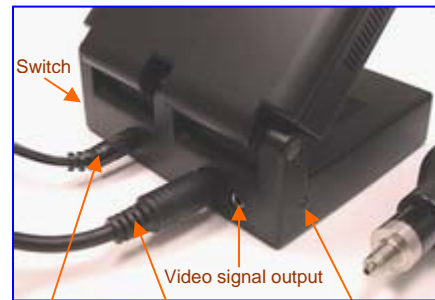


Figure 1

3. There is a power switch on the side of the module base. As the sign indicated, there are three positions respectively for 'WORK', 'OFF', or 'CHARGE' (see Fig.2). Turn the switch to 'WORK'. **With a normal power supply (either from battery or from AC adapter), the LED should light green.** Then, adjust the thumbwheels on the LCD panel to optimize the screen brightness & contrast.
- ❖ To allow the battery pack working longer, always remember to turn off this power switch during any long idle intervals or after daily operation.



Figure 2

**Note:** The Video Signal Output port is for external monitor use. Once this port is plugged, the 3.5" internal LCD will be disconnected.

### CI-1000-B (USB version)

1. Connect the CI-1000-USB1.1 Video Capture Device to the inspector handset as well as your computer USB port, as shown in Fig. 3.

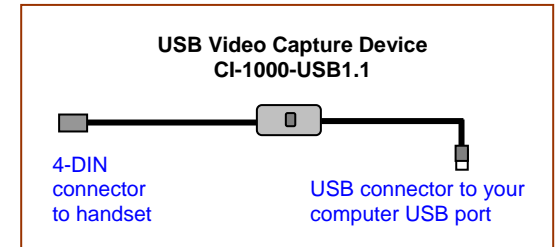


Figure 3

**Warning:** Do NOT use this USB Video Capture Device in any other unspecified systems because this dedicated USB module includes a 5V to 12V DC/DC converter to draw electric current from your computer to support the inspector handset. The 12V voltage in its 4-DIN connector may damage devices in your unspecified systems.

2. Follow the Lightel Video Capture Software User's Guide to Install and run the 'USB Video Driver' and 'Lightel Video Image Capture 1.0' in your computer.

### CI-1000-C (Handset version)

1. Connect the CI-1000 interface cable to the handset as well as the AC adapter, as shown in Fig. 4.

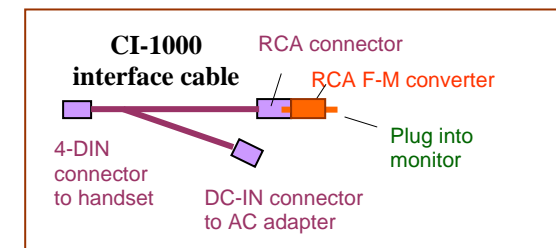


Figure 4

2. Plug the RCA male connector into your monitor video input.