

## Explanation of Error Display.

When an abnormality arises, Error No. is displayed on the LCD with the alarm sound. Deal with the problem based on the following table.

<b>Error 01</b> Alarm Sound Three beeps	<b>Description of problem</b> The source supply voltage is 10V or less.	<b>Action to be taken</b> Increase the source supply voltage.
<b>Error 02</b> Alarm Sound Three beeps	<b>Description of problem</b> The source supply voltage is 16V or more.	<b>Action to be taken</b> Decrease the source supply voltage.
<b>Error 03</b> Alarm Sound One long beep	<b>Description of problem</b> The discharging current is abnormal.	<b>Action to be taken</b> Disconnect the Ni-cd immediately.
<b>Error 05</b> Alarm Sound No sound	<b>Description of problem</b> Ni-cd is not connected.	<b>Action to be taken</b> Connect the Ni-cd.
<b>Error 08</b> Alarm Sound Three short beeps	<b>Description of problem</b> Paused due to high temperature.	<b>Action to be taken</b> Use 1A.

## Description

<b>Charger</b> .....	The unit which supplies electricity to Ni-cd.
<b>Discharger</b> .....	The unit which releases electricity from Ni-cd.
<b>Capacity</b> .....	The amount of electricity the Ni-cd can store.
<b>mAh</b> .....	A unit which denotes capacity. It is called 1000mAh that 1000mA (1A) is released for an hour. The value is calculated by multiplying discharging current and the time together.
<b>Internal Resistance</b> .....	A resistant element which Ni-cd has. The lower the internal resistance, the more power and higher average voltage.
<b>Discharging Cutoff Voltage</b> .....	The voltage of Ni-cd when the unit stops discharging.
<b>The number of cells</b> .....	The number of batteries which are connected in series in a Ni-cd battery pack.
<b>Constant Current Discharge</b> .....	The method of discharging at a constant current
<b>Discharging Current</b> .....	The current when discharging Ni-cd.
<b>Charging Current</b> .....	The current when charging Ni-cd.
<b>Full-Discharge</b> .....	The state that Ni-cd has been properly discharged.
<b>Over-discharge</b> .....	The state that Ni-cd has been discharged too far.
<b>Full-Charge</b> .....	The state that Ni-cd has been fully charged.
<b>Cycling</b> .....	A cycle that repeats discharging after charging.
<b>Cycle discharge</b> .....	Discharging Ni-cd after a full-charge in order to activate the Ni-cd or to compute the capacity.
<b>Refresh charge</b> .....	Charging Ni-cd after full-discharge to eliminate the phenomenon called "memory effect."
<b>AC</b> .....	Alternating Current.
<b>DC</b> .....	Direct Current.
<b>Delta Peak</b> .....	One of the methods which detects the point of full-charge by the rapid charger.
<b>A (ampere)</b> .....	A unit which denotes current.
<b>V (voltage)</b> .....	A unit which denotes voltage.
<b>Fuse</b> .....	A part which cuts off abnormal current to protect a circuit.
<b>Blow</b> .....	The state that the protector stops working when the power supply is overloaded.
<b>The Stabilized Power Supply Unit</b> .....	The unit which produces direct current from an AC mains power outlet.
<b>The Switching Power Supply Unit</b> .....	One of the stabilized Power supply units.
<b>Hydropack (Ni-MH)</b> .....	Nickel metal hydride battery which has higher capacity than Ni-cd.



## Q & A (Question & Answer)

### 1. Can this unit be used only for Ni-cd batteries?

Yes. This unit is designed only for Ni-cd and Hydropack. We have not confirmed if the unit can suit different kinds of battery.

### 2. Will the service life of a Ni-cd battery be shortened by the use of this unit?

The Ni-cd cannot be damaged if the number of cells and discharging current are properly set.

### 3. How long does it take to discharge the Ni-cd?

It depends on the remaining capacity of Ni-cd and discharging current.

### 4. What is "memory effect"?

When a Ni-cd is repeatedly charged and used after not having been discharged completely, the capacity of the Ni-cd is diminished. This phenomenon is called "memory effect." It is ideal to charge the Ni-cd which is completely discharged.

### 5. The unit does not work independently, although it works when it is linked with the charger. 2A fuse blew. Replace it.

### 6. The displayed capacity is different from the value on the label of Ni-cd.

The displayed value indicates the capacity at that time. It can be close to the value on the label when a fully charged Ni-cd is discharged.

### 7. Nothing appears on the LCD even by pressing the key.

This is because the power supply voltage is 11V or less or there is a break in the circuit of crocodile clips. Check the supply voltage and connect to the power supply outlet again.

### 8. Is the discharging capacity of Ni-cd different for 1A and 5A?

Yes. The more current, the faster the voltage gets lower. The display of the average discharging voltage is also different between 1A and 5A.

### 9. The voltage is still high after the completion of the discharge. Is the Ni-cd really discharged?

Even though the terminal voltage looks high after discharging, there is no remaining.

### 10. Even though Ni-cd can be discharged by other dischargers such as DX-101, the LEVEL stops discharging shortly after the start.

This may occur when 5A is used.

As mentioned in Q8, the unit stops discharging much earlier due to the low voltage.

### 11. The Ni-cd pack in the transmitter cannot be discharged.

The Ni-cd cannot be discharged directly from the Charger cord because of a diode in the charging circuit. Discharge the Ni-cd after taking it out of the transmitter.

### 12. What are the values for 2000mAh Ni-cd batteries?

They depend on the frequency of use and type of Ni-cd. Use a new Ni-cd as guideline.

### 13. What happens to the unit if a fuse blows.

In case of 7.5A fuse, the unit cannot discharge even though the LCD screen operates. In case of 2A fuse, all functions cannot operate. (All functions except fan operates when the unit is linked with BX-212)

### 14. The LCD contrast becomes darker in proportion to discharging.

This is because discharging heat increases the temperature of the LCD. Adjust with the Contrast Adjusting VR on the right side of the LCD. (Refer to P3)

### 15. The unit cannot start discharging even though there is a remaining current in Ni-cd.

Make sure that the right number of cells is selected. When the number is selected but the unit still does not work, either there is no remaining current or the service life of the Ni-cd has gone.

