



# AC3400 AC3410 COMPASS Operation Manual

Bism CORPORATION

5F, 3-6-18, Higashinonbashi, Chuo-ku, Tokyo 103-0004 Japan

Phone: +81-3-5640-8126 Fax: +81-3-5640-8131

E-mail: info@bism.co.jp URL: http://www.bism.co.jp

## Introduction

Thank you for purchase of our product.  
This product is diving gear for recreational diving use.  
This manual is the guidebook to provide instructions on how to use your compass for recreational diving.

We believe this manual is useful in mastering technology of a compass for people who have learned the right usage of a compass and obtained a C-card through proper training at an internationally recognized diving instruction organization as well as people who use it at C-card training. Please carefully read and digest the contents of this manual before use. We also suggest that you take this manual with you to refer to before diving.

Keep this manual in a safe place. Should you lose it, contact your original dealer or authorized distributor of our company. A replacement manual will be reissued later.

We are constantly researching and improving our compass, and so the product you purchased may differ in certain details from the one described in this manual. If you have any queries regarding your compass or the information contained in this manual, please feel free to contact our company at the address above.

## IMPORTANT INFORMATION

### Purpose of Use




This product is diving gear for recreational diving use.  
This is a measuring instrument which provides general display of a direction at the time of recreational diving.

### PRECAUTIONS

In order to use a compass safely, the right operation, periodical maintenance and check are indispensable. Carefully read the advice on safety given in this manual before diving.

In order to use the product safely and correctly, and to prevent the danger and the damage to the property of you or other people beforehand, various marks are used.

The indication and the meaning are as follows.

-  **Danger**  
Danger indicate a great risk of death or serious injury from improper use.
-  **Warning**  
Warning indicate a risk of death or serious injury from improper use..
-  **Caution**  
Caution indicate a risk of minor injury or damage to property from improper use.

[ Note ] Useful Information to know.

### Danger

- Use this product after having obtained a C-card and completing a proper training program at an internationally recognized diving school, and be familiar with diving gears, or under the instruction of the diving school. Otherwise it may cause an accident resulting in injury or death.
- Please be sure not to dive alone by any means, but to respect buddy system. Single diving may lead to a serious accident and is very dangerous.
- Please be sure to recognize all the handling method, the warning and the instructions with this manual before using this product. In addition, please use it in the ocean after understanding how to use.
- If this product starts to function abnormally, stop use immediately and consult with your original dealer or authorized distributor of our company.

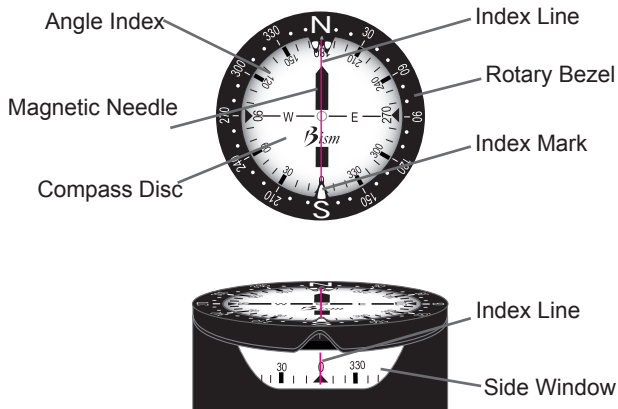
### Warning

- When you perform scuba diving, please carry out by good health condition. When you feel uneasy in condition, please do not push yourself and stop diving.
- Before performing scuba diving, please avoid to take alcohol and medicine, and the one who is in bad physical condition or with a chronic disease should see a doctor for diagnosis in advance.
- This product is designed on the basis of a general healthy person who has average physical strength. Divers need to plan and execute a safe diving which suited for them respectively.

### Caution

- If various solvents such as gasoline, spray liquid and cleaner such as cosmetics, adhesives and paint, and acid and alkali adhere, deterioration may be occurred. Please be careful enough so that these do not attach to the compass body and belt.
  - Though the product can withstand the shock in the usual use, drops and hard knocks may damage it.
  - When you wear the compass directly to the bare skin, weak skin and the allergic tendency may get a rash. When you get a rash, stop wearing of the compass, and consult with a medical specialist of dermatology.
  - Since it may become a safety problem, please do not modify the product. Responsibility cannot be taken about the trouble after modification.
  - If you use this product near what has strong influence to geomagnetism as listed below, error of the compass for direction reading may become large.
    - Permanent magnet ( Magnetic necklace etc.)
    - Metal (Steel desk, Metal locker etc.)
    - High-voltage line, Overhead wires
    - Electrical home appliances, Personal computer
- Accurate measurement cannot be performed in the following vehicles.
- Automobile
  - Ship and Airplane
  - Train
- Accurate measurement cannot be performed in a room, especially in the building of reinforced concrete construction.

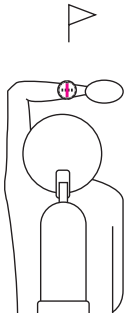
## NAMES OF PARTS



## USAGE OF A COMPASS

### ⚠ Caution

- When you see compass, please keep it so that disc face of compass becomes level. If you hold it aslant, it may not show correct angle.



Keep compasses at the centerline of the body and adjust it so that lubber's line may match with a direction of target.

Keep the disc face of a compass is leveled.

## Basic Navigation-1

### ⚠ Warning

- When you perform compass navigation, please carry out after learning the knowledge and technology about the right navigation.
- Please do not move an index mark during navigation underwater. There is a possibility of missing a direction.

### Move to the target



While being on land, face the index line to the direction of a target.

Memorize an angle index at the center of the index line on the compass disc from the side window. (In this case, 120 degrees.)

After an entry, hold the compass correctly, and turn your body to adjust direction so that the index line may be maintained at the angle which is and memorized.

Swim and move. When moving, move after deciding a target on extension of the index line within the range you can see it in underwater.



## Basic Navigation-2

### Move toward the angle decided



Memorize the angle decided, match the index mark to the angle. (In this case, 120 degrees.)

After an entry, hold the compass correctly, and turn your body to adjust direction so that the magnetic needle may be maintained at the position of the index mark or the index of the side window matches the angle decided.

Swim and move. When moving, move after deciding a target on extension of the index line within the range you can see it in underwater.

### [ Note ]

- There are various techniques besides the methods explained above in navigation. Please learn them under the instruction of the diving school.

## CARE AFTER USE & Storage

### Wash & Dry

### ⚠ Caution

- Equipment may be damaged if soaked in hot water of 50°C or more.

■Soak the whole equipment to fresh water for about 15 minutes. Then, rinse the whole in water to wash the salt away.

■Pour water and rinse it.

■Turn the bezel of compass in fresh water and take off the dirt and salt in opening.

■Avoid direct rays, dry it fully in the shade with the dry and sufficient ventilation.

### Storage

### ⚠ Caution

- If you leave the compass in the state of high temperature, such as in a car or on a beach, air bubbles are formed in compass case and may reduce visibility.

■Wash and dry the compass fully.

■Avoid direct rays, and store the compass in the place with the cool, dry and sufficient ventilation.

## Bism CORPORATION

5F, 3-6-18, Higashinonbashi, Chuo-ku, Tokyo 103-0004 Japan

Phone: +81-3-5640-8126 Fax: +81-3-5640-8131

E-mail: [info@bism.co.jp](mailto:info@bism.co.jp) URL: <http://www.bism.co.jp>