SERVICE MANUAL

IB-3500 RF BASE STATION

IB-3500

Tentative Edition

Table of Content

i) Notice

DIGI®

The material contained in this document is proprietary and for information only and is subject to change without notice. Teraoka Weigh-System assumes no responsibility for any errors or damages arising from misinterpretation of any procedure.

Screen displays, operating procedures and supporting features might vary with different software version releases.

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ii) Safety Information

The operator of the equipment shall comply with the safety and warning indications and procedures outlined in this document. Teraoka Weigh-System Pte Ltd assumes no responsibility or liability for failure to comply with these requirements.

- Repair and servicing of product, shall only be carried out by trained and qualified personnel.

Disclaimer:

Specifications are subject to change without notice. All dimensions shown are approximate. Please be aware that Teraoka has indicated that its hardware and software used in the product may require additional updates in the future as our product is continually under development. The need for such updates most likely applies to the Printer software.

CAUTIONS:

FOR PLUGGABLE EQUIPMENT, THAT THE SOCKET-OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

POUR LE MATÉRIEL RACCORDÉ PAR PRISE DE COURANT, LE SOCLE DE PRISE DE COURANT DOIT ÊTRE INSALLÉ À PROXIMITÉ DU MATÉRIEL ET DOIT ÊTRE AISÉMENT ACCESSIBLE.

FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATING OF FUSE.

POUR NE PAS COMPROMETTRE LA PROTECTION CONTRE LES RISQUES D'INCENDIE, REMPLACER PAR UN FUSIBLE DE MÊME TYPE ET DE MÊME CARACTÉRISTIQUES NOMINALES.

DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISCARD USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS

IL Y A DANGER D'EXPLOSION S'IL Y A REMPLACEMENT INCORRECT DE LA BATTERIE. REMPLACER UNIQUEMENT AVEC UNE BATTERIE DU MÊME TYPE OU D'UN TYPE RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU RÉBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

iii) Safety Regulations

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not

occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

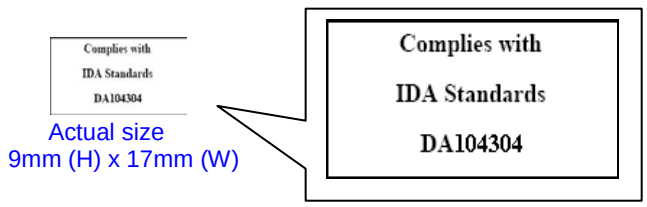
FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:
FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This
equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

IDA Compliance Statement: (Singapore)
This equipment registered to comply with IDA (Info-Communications Development Authority of Singapore) Standard under Dealer's Class License.



Industry Canada statement:
This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

IMPORTANT NOTE:
Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
(1) l'appareil ne doit pas produire de brouillage, et
(2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Déclaration d'exposition aux radiations:
Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

For Taiwan 警語:

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾

1. General

1.1 Model Specification

Model	:	IB-3500
Dimensions (in mm)	:	Body Casing Dimension - 230(L) x 210(W) x 51(H) With Upright Antenna - 230(L) x 210(W) x 205.5(H)
Color	:	White
LED (x4)	:	Red - Power Indicator Green - Data Transmit Indicator Orange - Data Receive Indicator Red - System Busy Indicator
Reset Button	:	1 x Mechanical Switch
Antenna (x4)	:	Antenna Color (White) 2 x Transmit Data (TX) 2 x Receive Data (RX)
Weight	:	1500g approx.
Operating System	:	Linux
Power Source	:	Ethernet Cable from POE Switch Port (48 Volt DC)
Voltage & Current	:	DC 48V, 0.35A
Operating Temperature Ranges	:	10ºC to +40ºC
Operating Humidity	:	85% Max. Non-condensing
I/O Interface	:	Ethernet 10/100 Base T
Housing Material	:	Powder Coated SPCC Metal Sheet

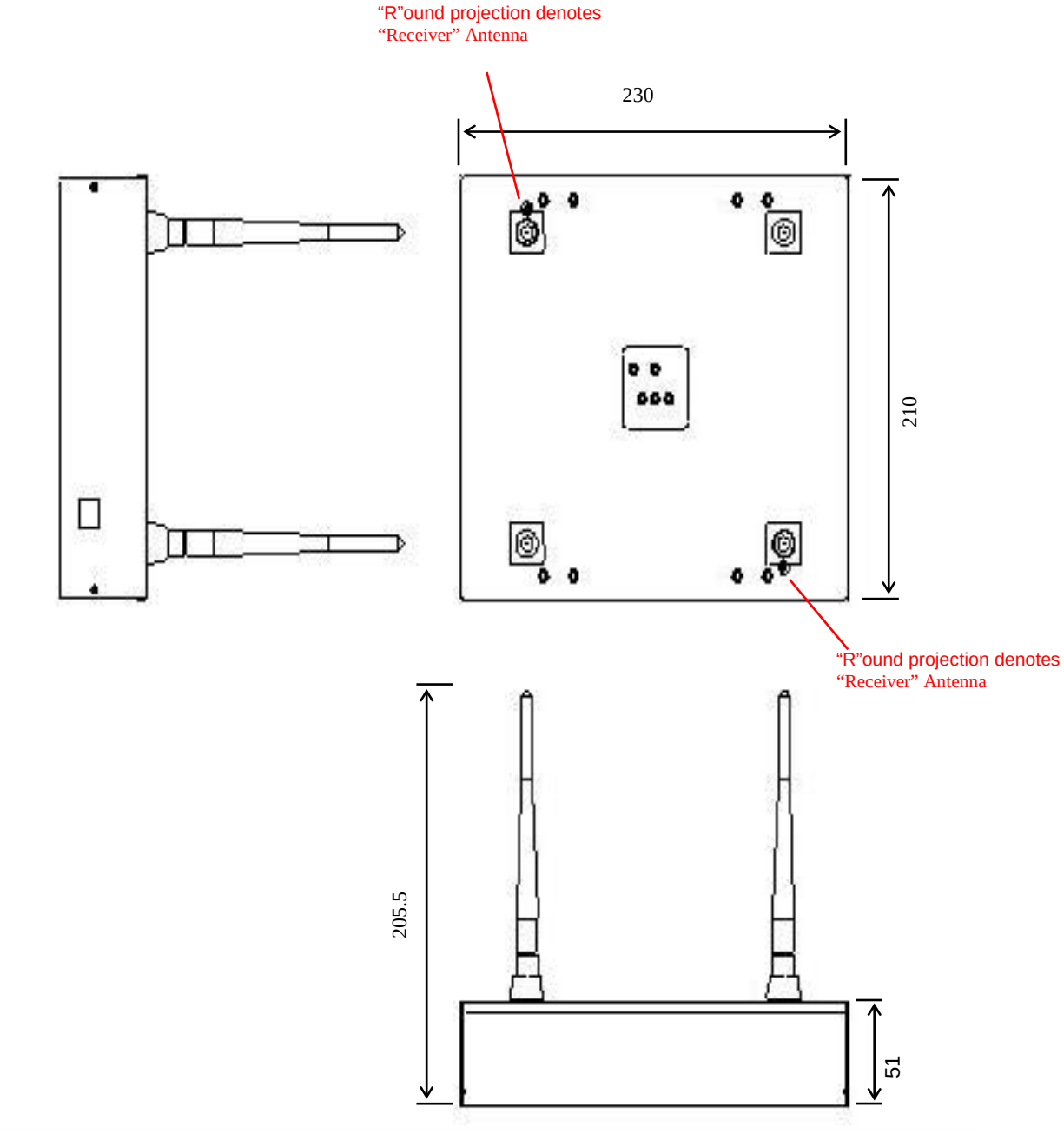
1.2 DC Specification

Power Source	:	External	:	Ethernet Cable from POE Switch Port (48 Volt DC)
	:	Internal	:	NA
Operating Temperature	:	10ºC to +40ºC		
Humidity	:	85% Max. Non-condensing		

1.3 RF Specification

RF Standard	:	FCC ARIB STD-T66 NCC, C-TICK, IC, CE
Modulation	:	GFSK, MSK
Frequency Band	:	2.402GHz to 2.475GHz
Channel list	:	73 Channels
Transmit Power	:	16.35dBm (GFSK) 8.58dBm (MSK)
Receiver Sensitivity	:	-90dBm (typical), PER = 1%

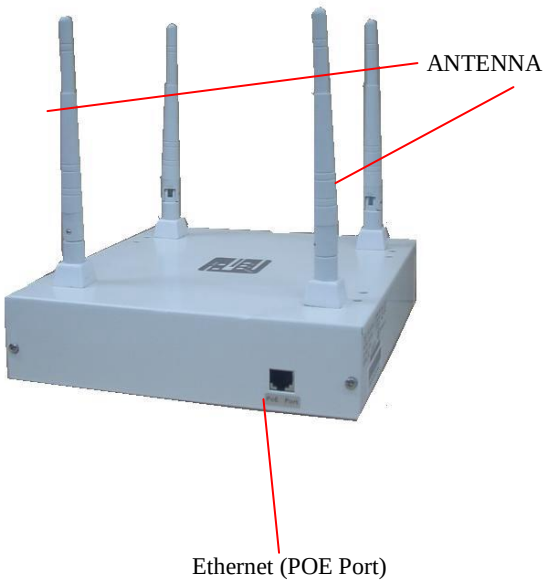
2. Dimension


"R"ound projection denotes
"Receiver" Antenna
230
210
"R"ound projection denotes
"Receiver" Antenna
205.5
51

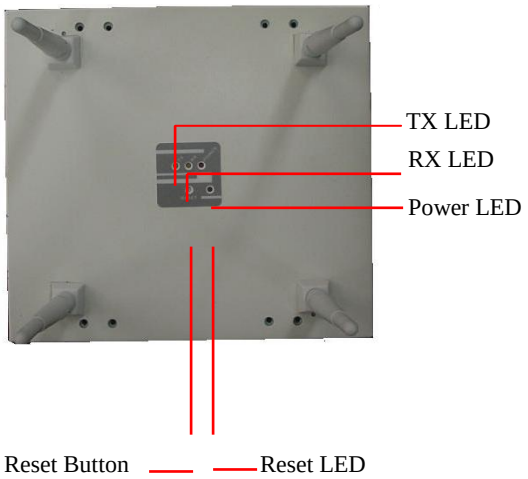
3. IB-300 Station Setup Diagram & Spec Setting

3.1 Setup Diagram

Front View

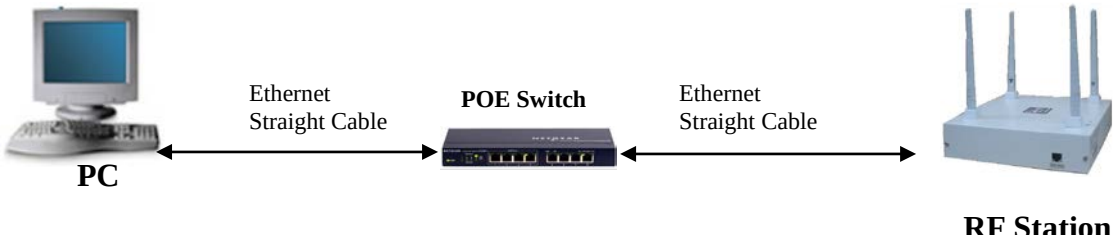


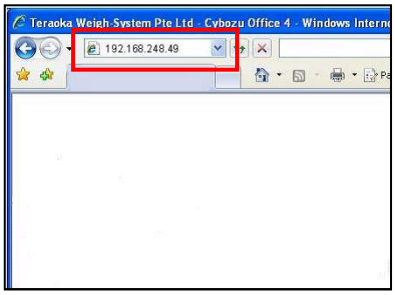
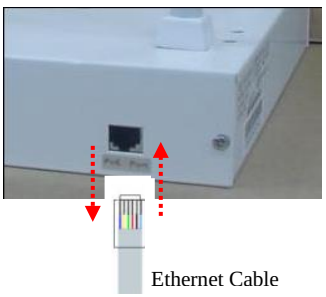
Top View

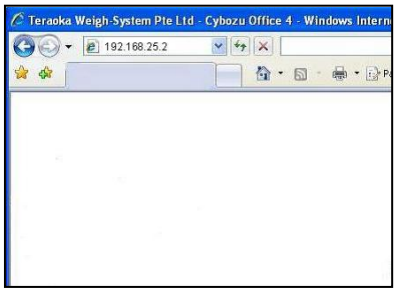


LED / BUTTON	Descriptions
Power LED (Red)	• Power On Indicator.
TX LED (Green)	• The indicator light will be stay 'On' or 'Blinking', when Transmit Data communication is connected.
RX LED (Orange)	• The indicator light will be stay 'Toggle', when Receive Data communication is connected.
Reset LED (Red)	• The indicator light will be on a time when press the reset switch. • The indicator light will be "on → off" or "off → on" when data busy.
Reset Button	• To reset the program when programming running error is appear.
Ethernet (POE Port)	• For RF Station power input voltage go through Ethernet LAN cable. • Transmit/Receive the data with Info Server (CT-3100)

3.2 RF Station Setup



PROCEDURE	PICTURE
1) Double click open the **[Internet Explorer]** icon.	
2) In the Web Browser, key in the RF Station IP address **[192.168.50.49]** accesses to RF Station Setting main screen. ***Note:*** *192.168.50.49 is Default IP Address*	
3) In the RF Station Setting main screen, keying the new **"IP Address"** and **"Network Mask"**. After that click **[Submit]** to save change the setting. *Example New IP Address: 192.168.50.XXX* ***Note:*** *Click **[Reset]** will cancel the setting changed.*	
4) After finish new setting changed need to plug out the Ethernet cable from POE switches and then plug in again to implement the new setting.	

5) Repeat the Step 2, and keying the new IP Address to checking the setting is changed. ***Note:*** *Ensure the **PC IP Address** is also change to under same network.* *(Example: 192.168.50.123)*	

4. Revision Records

Serial No.	Date	Edition Status	Description of Changes	Software Version	Remarks
001	DEC ‘13	00	First Release	NA	
002	JAN’13	00	Update IC statements	NA	