

Instruction Manual for Use and Maintenance Wireless Patient-Nurse Call Terminals TL-03W (Head Bed terminal) TL-03WT (Bathroom Terminal with pull cord)

### Instructions for use and maintenance.

Thank you for purchasing the wireless TERMINALS for Patient-Nurse Bed call code TL-03W; the BED extension with call button code PR-L0A + PR- PR-X1 and Bathroom Terminal with pull-cord cod. TL-03WT.

Before installing and using the devices, read carefully this user manual with particular reference to the "Warnings for use and maintenance" section below:

### Introduction

"General warnings for use and maintenance"

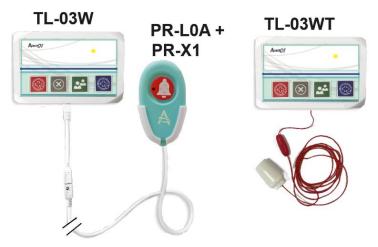
- Keep this booklet carefully for any future further consultation.

After removing the packaging, check the integrity of the appliance. In particular, that the appliance is intact without visible damage that could be caused by transport.

If in doubt, do not use the appliance and contact qualified personnel. Packaging elements (plastic bags, boxes or cardboard) must not be left within reach of children as potential sources of danger.

- The devices are designed for operation in protected environments at a temperature between +5°C and +40°C.
- Do not leave the appliances exposed to atmospheric agents (rain, sun...);
- Do not allow the appliances to be operated by children or incompetent people without any supervision.
- In the event of a fault and/or malfunction of the appliances, turn them off and do not tamper with them.
- For any repairs, contact the reseller or a qualified technical assistance.
- Never immerse the appliances in water.
- Do not use the devices near electromagnetic sources due to possible interference.
- Pacemakers, hearing aids and medical devices may be affected.
- Cleaning with neutral disinfectants
- The Patient-Nurse Call Terminals work with n. 2 "AAA" 1.5V batteries; Please only use long-life batteries.
- Keep this instruction manual for future reference.

### **Wireless Patient-Nurse Call Terminals**



### General Principles:

Completely wireless professional Patient-Nurse Call System, this system will give the possibility of installing an entire Ward in just a few hours of work. Inside the rooms it will take just a few minutes to fix the terminals near the beds.

The devices are battery powered with an expected useful life of approximately 5 years depending on the number of calls made.

The type of batteries required are commercial "AAA long life" type.

The call can be received on stationary or portable devices, single or doublesided LED displays, digital LCD monitors, software for keeping a call log on memory along with all NCS record and monitoring intervention and maintenance schedules.

- · Easy and immediate system installation
- Easy update even at a later time
- No masonry works are necessary
- Large operating range
- · Monitoring the operation of the nurse call system in real time
- · Long battery life

Automatic verification of device operation and low battery warning:

The TL-03 series call terminals are equipped with a self-monitoring system for the battery level and the correct functioning of the terminal.

If the SOFT-IO monitoring software has been supplied along with the system, these two functions will be automatically enabled and managed by the software.

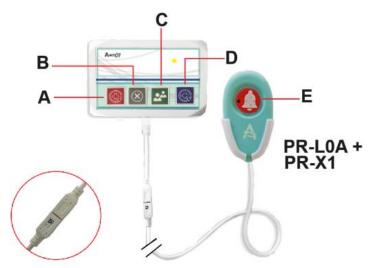
However, if monitoring software has not been provided, it will only be possible to manage the battery level.

This low-battery alarm will be displayed on the call terminal when the red button is pressed by displaying 10 red flashes on the front LED, and also on the various receivers by means of a low battery ICON symbol besides to the related call reference.

After this warning, however, the keyboard would be able to make several dozen other calls.

Disconnection warning with self-reset on the Bed Extension with Call Button. Bed Extension terminal made in Antibacterial silicone set with luminescent button and patient reassurance LED (as well as room light controls); Set also with cable safety release system in case subjected to a traction greater than approximately 3 kg.

TL-03W: Wall-Mounted Patient-Nurse Call Terminal With wall support and connection inlet for Bed Extension with Call Button.



4 buttons operation:

- A Nurse Call Button
- B Cancel/Reset Call button
- C Nurse Presence button
- D Doctor Call button (second level call)

E- Nurse Call Button (Bed Extension with Call Button)

- Bright LED and Beep for patient reassurance.
- Compatible with bed extensions with call button codes PR-L0A and PR-L01 with PR-X1 connection cable.

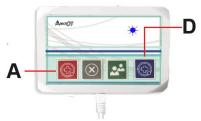
**Make a Call**: Press and release the RED button (A) on the call terminal or on the button on the bed extensions (E) (PR-L0A/01).

**Cancel the call**: Press the RESET button indicated in the figure with the letter (B).

**Nurse presence**: Press the button (C) to warn about the presence of a nurse in the room; the button (C) will automatically cancel the call in progress and activate the presence notification.

**Cancel Nurse Presence**: Press the RESET button indicated in the figure with the letter (B).

**CALL FOR SUPPORT STAFF** (Second level call): To call the STAFF ASSISTANCE with a 2<sup>nd</sup>. Level call, it is necessary to hold down the Call Blue Button (D) and simultaneously press the Red Call Button (A) on the call terminal.



**Cancel the call to the SUPPORT STAFF** (Second level call): Press the RESET button indicated in the figure with the letter (B).

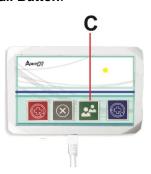
**Disconnection Alarm**: If the bed extension with call button is disconnected or its connector is not inserted correctly, the call terminal will send both an audible and visual "Disconnection" alarm.

It will therefore be necessary to check the connection of the Bed Extension Cable, in this way, when everything is correctly connected, the alarm will stop automatically.

SPECIAL FUNCTIONS: These procedures are intended and reserved to specialized operators:

-If the system sends a **Disconnection Alarm** of the Bed Extension with Call Button and it is not possible to reconnect any new replacement extension terminal, it will be possible to temporarily deactivate the **disconnection control** and disable both the acoustic and visual alarms.

## To Disable the Connection control of the Bed Extension with Call Button:



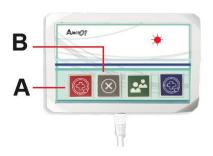
To do so, please keep the Presence button (C) pressed for a few seconds until the LED flashes 6 +3 times, this means that the verification of the connection of the bed extension with call button has been disabled.

When a new bed extension with call button is duly connected, the connection control function will be automatically reactivated.

## Automatic control function of the correct functioning of the call terminal:

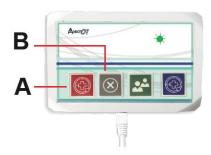
The call terminal periodically sends a "signal of life" and "good functioning", which includes the battery charge status; this function can only be managed by specific software but can be disabled MANUALLY. Such a function must be enabled only in the presence of NCS management software

To deactivate the automatic control function of the correct functioning of the call terminal:



- Press the RESET button (B) and hold down until a White "setting mode" LED lights up, then, still holding down the Button (B), press the "Nurse call" Button (A), so the LED will light up in RED colour. This will deactivate the automatic control function.

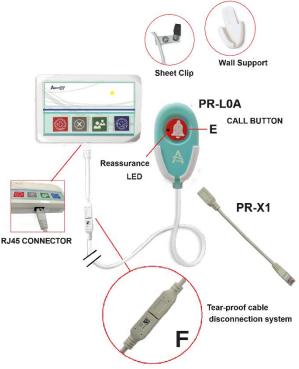
### To Activate the automatic control function:



- Press the RESET button (B) and hold down until the White "setting mode" LED lights up, then, still holding down the Button (B), press the "Nurse call" Button (A), so the LED will light up in GREEN colour. This means that the **automatic control function** is active again.

### PR-L0A + PR-X1

Bed Extension with Call Button, Reassurance LED, Tear-proof cable disconnection system, sheet clip and wall support.



### Make a call:

Press and release the Red Button (E)

### Safe cable disconnection:

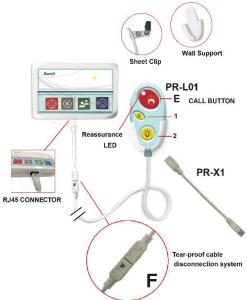
If the bed extension with call button is subjected to excessive force (approximately 3 kg) the safety connector (F) will detach, preventing the cable from being torn or damaged. It will be necessary to join the USB (F) type connectors again, maintaining the correct position and without forcing them. (before use, check the correct connection)

Dimensions: 48mm x 90mm x 18mm

Cable length: 2.70 m

## PR-L01 + PR-X1

Bed Extension with Call Button, Reassurance LED, Room Light controls; Tear-proof cable disconnection system, Sheet Clip and Wall Support.



### Make a call:

Press and release the Red Button (E)

Light control: Light control press button (1) or button (2)

### Safe cable disconnection:

If the bed extension with call button is subjected to excessive force (approximately 3 kg) the safety connector (F) will detach, preventing the cable from being torn or damaged. It will be necessary to join the USB (F) type connectors again, maintaining the correct position and without forcing them. (before use, check the correct connection)

Dimensions: 48mm x 90mm x 18mm

Cable length: 2.70 m

# PR-L01 collegamenti elettrici

Plug in Connector A on the control unit, carry out the necessary wiring on the electrical system, so as to be able to control the lights in impulse mode via relay

(attention, the maximum voltage allowed on the wiring is 24VAC/DC)



fig. B

Remove the cover plate of the terminal and plug in the supplied wiring (fig. B)

Respecting the polarity of the connector, attach the plug with the cables referring to the labels on them





### **Technical features**

Vmax: 24 VDC/AC

Imax: 0,5A

Light connection cable: Com: Common Connection

L1: Courtesy light L2: Main Light

## PR-L01 Relay connections

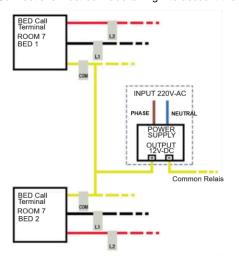
Example connection diagram of 2 TLxx call terminals with 2 lights control each by using 4 SSR-10 solid state relays and a common 12Vdc power supply.

The SSR-10 solid state relay has a continuous voltage input (respect the polarity) highlighted by the numbers 3 (positive) and 4 (negative) and an alternating voltage output highlighted by numbers 1 and 2



#### ATTENTION

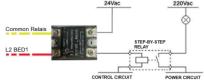
Connections must be made taking into account the labels and not the colours:



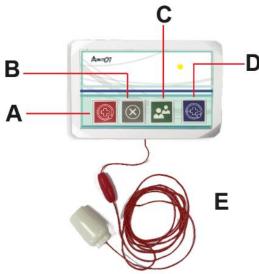


Example of connection of the single SSR-10 relay with a single light from the bed head terminal. The load can control the input of each respective step-by-

step relay (24VAC) which will take care of turning on the lamp via the connection shown in the image:



Wall mounted Patient-Nurse Call Terminal for BATHROOM for call activation with pull-cord.



4 buttons operation:

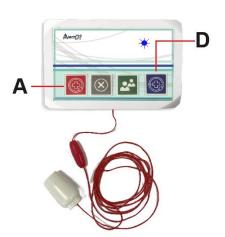
- A Nurse Call Button
- B Cancel/Reset Call button
- C Nurse Presence button
- D Doctor Call button (second level call)
- E Call PULL-CORD (with anti-strangulation safety system)
- -Bright LED and Beep for patient reassurance

**Make a call**: Press and release the red key (A) on the call terminal or pull the call cord (E).

**Cancel the call**: Press the RESET button indicated in the figure with the letter (B).

**Nurse presence**: Press the button (C) to warn about the presence of a nurse in the room; the button (C) will automatically cancel the call in progress and activate the presence notification.

**Cancel Nurse Presence**: Press the RESET button indicated in the figure with the letter (B).



CALL FOR SUPPORT STAFF (Second level call): To call the STAFF ASSISTANCE with a 2<sup>nd</sup>. Level call, it is necessary to hold down the Call Blue Button (D) and simultaneously press the Red Call Button (A) on the call terminal.

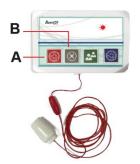
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Cancel the SUPPORT STAFF call (Second level call): Press the RESET button indicated in the figure with the letter (B). SPECIAL FUNCTIONS: These

procedures are intended and reserved to specialized operators.

## Automatic control function of the correct functioning of the call terminal:

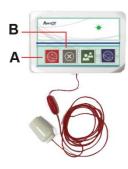
The call terminal periodically sends a "signal of life" and "good functioning", which includes the battery charge status; this function can only be managed by specific software but can be disabled MANUALLY. Such a function must be enabled only in the presence of NCS management software



To **Deactivate the automatic control function** of the call terminal:

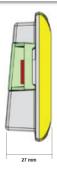
- Press the RESET button (B) and hold down until a White "setting mode" LED lights up, then, still holding down the Button (B), press the "Nurse call" Button (A), so the LED will light up in RED colour. This will deactivate the automatic control function.

### To Activate the automatic control function of the call terminal:

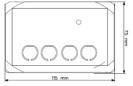


- Press the RESET button (B) and hold down until the White "setting mode" LED lights up, then, still holding down the Button (B), press the "Nurse call" Button (A), so the LED will light up in GREEN colour. This means that the **automatic control function** is active again.

## TL-03W & TL-03WT







### Technical features:

- Dimensions: 115mm x 75mm x 27mm
- · Wall fixing bracket distance between holes: 84.5 mm
- Disconnection alarm Bed extension with call button: (PR-L0A /PR-L01 + PR-X1)
- Pull-Cord call System (with anti-strangulation safety system) (TL-03WT)
- LED light Patient tranquillising
- Acoustic and visual alarm on call terminals.
- Battery life: approximately 15,000 calls or 5 years with 8 calls per day

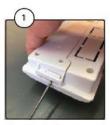
### Power Source:

- 2 long-life AAA batteries (Varta long-life brand is recommended)
- · Low battery warning
- Bed Extension with Call Button input connector type: RJ45
- · Materials: ABS and antibacterial silicone.
- · Maximum transmission distance in free area approx. 400 m
- · Standby consumption: 5 mA
- · Consumption in Transmission mode: 60 mA
- Frequency: 433 MHz
- Frequency deviation: +/- 2.5 kHz
- POCSAG transmission protocol
- Protection Degree: TL-03W: IP 54 / TL-03WT: IP65

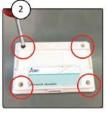
## Replacing batteries on Call terminals

### Attention:

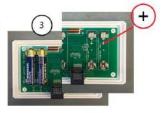
When necessary, replace the batteries (\*) respecting their polarity and following the steps shown below:



Unclip the keyboard from the base with a flat headscrewdriver



Unscrew the 4 screws with a screwdriver



Replace the 2XAAA Long life batteries respecting the polarity.



Close the screws with a screwdriver



Reposition the keyboard on the base

(\*) Dispose of batteries in compliance with local regulations.

### **DECLARATION OF CONFORMITY**

#### WARRANTY

You will receive a certified and properly functioning device. The seller guarantees a 2-year warranty from the date of purchase. The guarantee is valid for every country. The warranty does not cover damage caused by improper use or causes of force majeure and normal wear and tear.

#### NOTES ON THE DEVICE AND DISPOSAL OF BATTERIES

Warning: batteries contain polluting substances and must not be thrown into common waste; they must be disposed of according to the separate collection methods required by the regulations in force in the area.

#### COMPLIANCE

The product meets the essential requirements of Directive 1999/5/EC The declaration of conformity can be requested directly from the manufacturer.

#### INFORMATION TO USERS

Pursuant to art. 13 of Legislative Decree 25 July 2005, n. 151 "Implementation of the Directives

2002/95/EC, 2002/96/EC and 2003/108/EC, relating to the reduction of the use of substances dangerous in electrical and electronic equipment, as well as in the disposal of waste", the symbol of the crossed-out wheelie bin shown on the equipment, or its packaging indicates that the product must be collected separately from other waste at the end of its useful life. The user must, therefore, take the equipment that has reached the end of its life to the appropriate separate collection centers for electronic and electrotechnical waste, or return it to the retailer when purchasing new equipment of an equivalent type, on a one-to-one basis. Adequate separate collection for the subsequent sending of the decommissioned equipment for recycling, treatment and environmentally compatible disposal contributes to avoiding possible negative effects on the environment and health and promotes the reuse and/or recycling of the materials it is made of the equipment.

Illegal disposal of the product by the user entails the application of administrative sanctions provided for by current legislation.





Any other use than those descived are considered improper and prohibited.



