

Tablet Sleeves and Charging Dock (User Guide)

A) Introduction

The Charge Dock – C7011Xyz(*) is a device that provide charging function to Tablet using contactless charging. With the USB Type-C connector interface built into the Tablet sleeves, the Tablet sleeves allows you to easily connect various Tablet to perform battery charging function.

What's in the box

Your docking station ships with the components shown below:

1. Docking station
2. Tablet sleeves
3. User guide

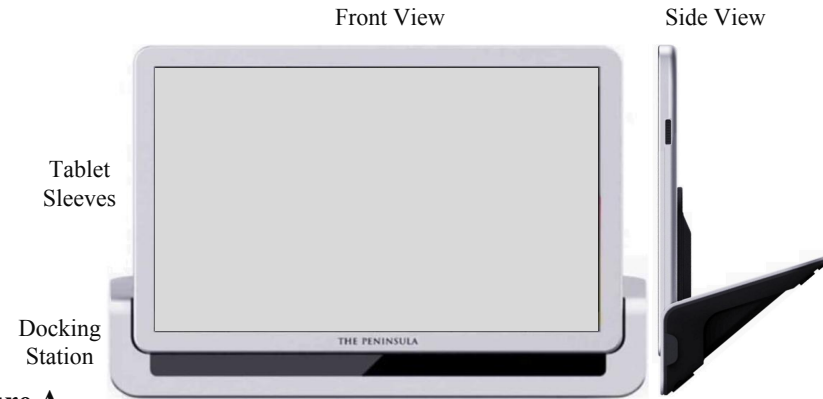


Figure A

B) Hardware requirements

Before using the Charge Dock, ensure that Tablet has a USB Type-C that is designed to support charging function.

C) Setting up your docking station

1. Connect the USB Type-C connector of the Sleeves to the Tablet.
2. Connect the DC jack to the 2.1 mm DC-in power input on the Charge Dock – C7011Xyz.
3. Place the Tablet into the Sleeves and align it properly.



Figure C

D) Charging Handset

The Charge Dock – C7011Xyz features a wireless charging pad for charging Tablet.

Steps

1. Align and place the Tablet on the Charge Dock.
2. The Tablet charging indicator should turn on and the Tablet should start charging automatically.



Figure D

Remarks : D100Xyz (*)

X= D (contact charging), E (wireless charging)
y = A, B, ..., etc. stands for various Tablet models that can fit into the provided Tablet Sleeves
z = 1, 2, ..., etc. stands for various colour for the device (1=Silver, 2= Black,, etc.)

C701Xyz (Tablet Sleeves / Dock)

Theory of Operations

A) Introduction

The Charge Dock – C7011Xyz(*) is a device that provide a basic charging function as well as waking up a tablet device, using a very basic form of close proximity detection (without a touch).

What's in the system

The docking station system do have the following components shown below:

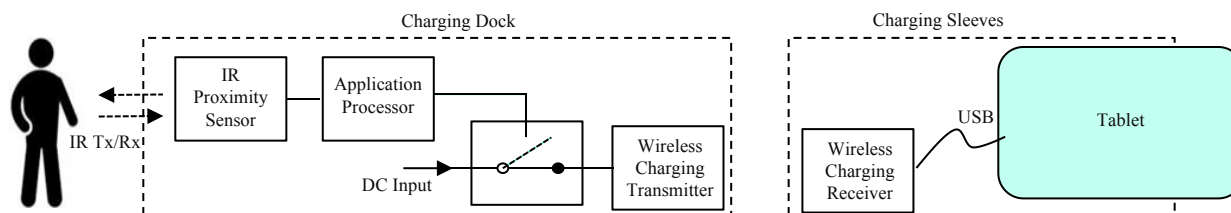
1. Docking station :
 - a. IR Transmit / Receive module (IR proximity sensor),
 - b. Application Processor
 - c. DC input,
 - d. Circuit to generate instantaneous voltage dip for Wireless Charging Transmitter while Tablet is on dock
 - e. Wireless Charging Transmitter module
2. Handset sleeves : Wireless Charging Receiver module

B) Operations (Charging function)

1. Upon the installation of Wireless Charging Transmitter & Receiver on the Dock & Sleeves (respectively).
2. The Wireless Charging Transmitter will transmit electricity through the air by creating a magnetic field between two circuits, a transmitter and a receiver

C) Operations (Proximity Sensing, while Tablet is setting on Dock)

1. With the built-in IR Proximity Sensor, the Dock will send the instantaneous voltage dip to the Sleeves. Hence, it will turn the screen on upon someone approaching to the Docking station.
2. Operating procedure is as follows :
 - a. Put the Tablet onto the dock
 - b. When someone (or, an object) approaching to the Docking station
 - c. The proximity sensor 'detect and analyse' a large enough change from the background readings and react appropriately.
 - d. The proximity sensor will, then, trigger an interrupt and send a signal to the Application Processor (when the detected IR signal past the threshold that was set).
 - e. Application Processor control the power line circuit to generate instantaneous voltage dip while charging the tablet
 - f. The tablet will turn the screen on.



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.

Note: 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 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 or more 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Radiation Exposure Statement

This device complies with FCC RF radiation exposure limits set forth for an uncontrolled environment.

The FCC certification of this device refers to RF exposure testing performed in typical operating conditions, where a person is no closer than 20 centimeters from the device surface at all times, except for non-repetitive patterns with transient time intervals in the order of a second. Only in the stated conditions, the device is shown to fully comply with the FCC RF Exposure requirements of KDB 447498.