

THEATRO COMMUNICATOR

Contact Information

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Product Information

Product Name	Communicator 3
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Product Specifications

PHOTOGRAPHS OF EUT

External



Internal



Physical Characteristics

Dimensions	Height=60mm, Length=46.2mm, Width=14.7mm
Weight	1.5 oz or 42.5g
Power	950 mAh Li-Ion rechargeable battery
Connectivity	USB 3.0 Type-C
Notification	LED
Color	Grey
Audio	Handset Mode

Performance Characteristics

CPU	500Mhz ARM Cortex-A5
Operating System	Linux
Memory	128Mb RAM/ 256Mb Flash

WLAN Radio Characteristics

Operating Frequency	2.4 GHz Channels: Ch1 to Ch11(2401 - 2473 MHz) 5GHz Channels: U-NII-1 (5170 – 5250 MHz): Ch36, Ch40, Ch44, and Ch48 U-NII-2A (5250 – 5330 MHz) [DFS Channels]: Ch52, Ch56, Ch60, and Ch64 U-NII-2C (5490 – 5730 MHz) [DFS Channels]: Ch100, Ch104, Ch108, Ch112, Ch116, Ch120, Ch124, Ch128, Ch132, Ch136, Ch140, and Ch144 U-NII-3 (5735 – 5835 MHz): Ch149, Ch153, Ch157, Ch161, and Ch165
No of Channels	11 Channels in 2.4 GHz , 25 Channels in 5G
Channel Spacing	2.4GHz: 20MHz, 40MHz 5GHz: 20MHz, 40MHz, 80MHz, 160MHz
Transmitted Power	14dBm
Modulation	BPSK, QPSK, QAM
Data Rate	802.11b: 1, 2, 5.5, 11 Mbps 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps 802.11n (20 MHz): 6.5, 13, 19.5, 26, 39, 52, 58.5, 65 Mbps 802.11n (40 MHz):

	13.5, 27, 40.5, 54, 81, 108, 121.5, 135 Mbps 802.11ac (20 MHz): 6.5, 13, 19.5, 26, 39, 52, 58.5, 65, 78 Mbps 802.11ac (40 MHz): 13.5, 27, 40.5, 54, 81, 108, 121.5, 135, 162, 180 Mbps
Antenna Type	Chip Antenna
Number of antenna	1
Antenna Gain	2.4GHz: 3.2dBi 5GHz: 4.2dBi
Supply Voltage	5VDC, 3.3V Battery
Environmental Conditions	-30 to 85 °C

BT RF Characteristics

Bluetooth Specification (Power Class)	Version 4.2 (Class 1)
Channel Frequency (Spacing)	2402 to 2480 MHz (1MHz)
Number of RF Channel	79
Output Power (BDR)	3 to 11 dBm
Output Power (EDR)	-2 to 10 dBm
Receiver Sensitivity (BER<0.1%)	-80 dBm
Receiver Maximum Input Level (BER<0.1%)	-20 dBm
Receiver EDR Sensitivity (BER<0.007%) (8DPSK)	-77 dBm
Supply Voltage	5VDC, 3.3V Battery
Environmental Conditions	-30 to 85 °C

BLE RF Characteristics

Bluetooth Specification (Power Class)	Version 4.2 (LE)
Channel Frequency (Spacing)	2402 to 2480 MHz (2MHz)
Number of RF Channel	40
Output Power	-2 to 10 dBm
Receiver sensitivity (PER < 30.8%)	-70 dBm
Maximum input signal level (PER < 30.8%)	-10 dBm
Supply Voltage	5VDC, 3.3V Battery
Environmental Conditions	-30 to 85 °C

Product Function and Intended Use

Smaller than a car key fob and weighing just 1.5oz, the Teatro **Communicator** was designed with hourly employees in mind. It is simple, voice-controlled AI interface takes employees' attention off their device and back to what they're doing. With Teatro's **intelligent personal assistant** and **voice-controlled** mobile app platform, they can call for backup, check inventory, locate a manager, and simply communicate with a team member—enabling them to do more, better.

- No hardware costs
- 8 hour battery life
- Voice-controlled interface
- Discreet—clips easily onto belt loop or collar
- Wi-Fi enabled



Figure 1: Communicator

Operational Description

How does Communicator work?

LED

Provides the status of the Communicator

Volume Buttons

To increase or decrease the volume levels

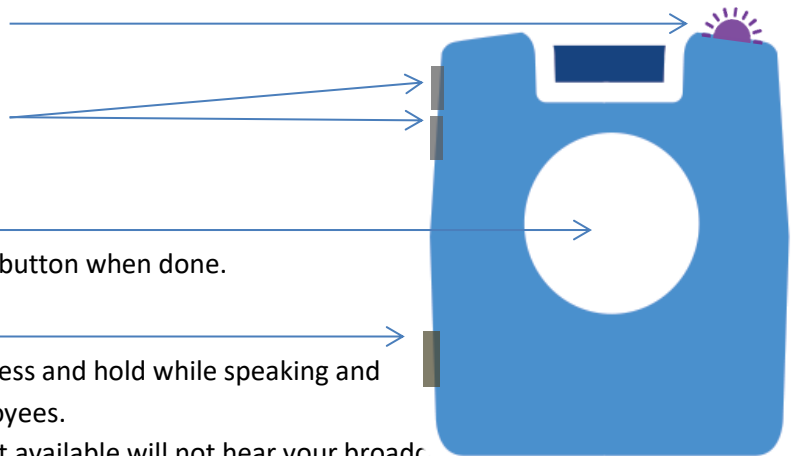
Command Button

Press and hold when speaking. Release the button when done.





Broadcast Button

This button is similar to a two-way radio. Press and hold while speaking and the message is broadcasted to all the employees.

Please note that the employees who are not available will not hear your broadcast.



What do the LED lights mean?

Blinking Purple: Communicator is ready for use . Always choose the blinking purple communicator when logging on	
Solid Orange: Communicator is charging in the rack	
Blinking Green: Communicator is performing Tx/Rx operation	
Blinking Red: Communicator is not connected to the Wi-Fi network	

Communicator Status

Single tap the command button to set your status to:

- Engaged
This indicates that you are with a customer and not available to talk. You will hear messages and announcements once you are free.
- Available
This indicates you are free and available to talk.

Commands for Store Associates

Press and hold the Command button and say:

- **Hello <employee first & last name>** – speak directly to someone (one to one). Say “hello” and the person’s first and last name. Tap the Command button to end the conversation.
- **Hello <group name>** – speak directly with a group of associates. Say “hello” and the group you want to talk to. Tap the Command button to end the conversation.
- **Message <employee first & last name>** – leave a message for an employee. Say “hello” and the person’s first and last name.
- **Play Messages** – You’ve got mail...”ear mail” that is! Use this command to hear your messages.
- **Locate <employee first & last name>** – find the location of an employee.
- **Who is near <location name>** - Find a colleague or check coverage. Say “who is near” and the location name.
- **Register Backup** – Requests help to the register. The alert repeats until an associate responds with “Copy That”.
- **Carry Out (front end)** – Requests carry out help at the front end. The alert repeats until an associate responds with “Copy That”.
- **Manager Assistance (front end)** – Requests manager help at the front end. The alert repeats until a manager responds with “Copy That”.

Commands for Store Leaders

In addition to the commands provided for the store associates, store leaders have access to the following commands:

- **Store Coverage** – Use this app to understand the location of all employees.
- **Locate <employee first & last name>** – Locate an employee in the store.
- **Who Is Near <location name>** - Assess the coverage of a location in the store.
- **Message <group name>** – Leave a message for a group. Messages last for 3 days
- **Interrupt All** – Is there an emergency and you need to talk with everyone immediately? Use “Interrupt All” to reach every employee, even if they are in a conversation or if their status is set to “engaged”.
- **Interrupt <employee first & last name>** – Use this app to open a one-to-one with an individual, no matter if their status is set to “engaged”.
- **Announcement <Now/ Hour/ Today>** – Configure an announcement to be sent to the entire store or group, and determine the “time to live” for the announcement. Options include:
 - Announcement Now (5 min)
 - Announcement Now <group name>
 - Announcement Hour (60 min)
 - Announcement Hour Today <group name>
 - Announcement Today (end of day)
 - Announcement Today <group name>

FCC 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 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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your 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.

Specific Absorption Rate (SAR) information:

This Communicator meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health. FCC RF Exposure Information and Statement the SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types: Communicator has also been tested against this SAR limit. This device was tested for typical body-worn operations with the back of the phone kept 0mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain an 0mm separation distance between the user's body and the back of the phone. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.

ISED Statement

English: This device complies with Part 15 of the FCC Rules [and contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's 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.

The digital apparatus complies with Canadian CAN ICES - 3 (B)/NMB - 3(B).

French: L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

l'appareil numérique du ciem conforme canadien peut - 3 (b) / nmb - 3 (b).

This device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS 102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

cet appareil est conforme à l'exemption des limites d'évaluation courante dans la section 2.5 du cnr - 102 et conformité avec rss 102 de l'exposition aux rf, les utilisateurs peuvent obtenir des données canadiennes sur l'exposition aux champs rf et la conformité.

Informations sur le débit d'absorption spécifique (DAS):

Ce Communicator répond aux exigences du gouvernement en matière d'exposition aux ondes radio. Les lignes directrices sont basées sur des normes élaborées par des organisations scientifiques indépendantes à travers une évaluation périodique et approfondie des études scientifiques. Les normes incluent une marge de sécurité substantielle conçue pour assurer la sécurité de toutes les personnes indépendamment de leur âge ou de leur état de santé. Information et déclaration d'ISDE sur l'exposition aux RF la limite DAS est de 1,6 W / kg en moyenne sur un gramme de tissu. Types d'appareils: Communicator a également été testé par rapport à cette limite SAR. Cet appareil a été testé pour des opérations typiques portées sur le corps, le dos du téléphone étant maintenu à 0 mm du corps. Pour rester conforme aux exigences d'exposition RF d'ISDE, utilisez des accessoires qui maintiennent une distance de séparation de 0 mm entre le corps de l'utilisateur et l'arrière du téléphone. L'utilisation de clips de ceinture, d'étuis et d'accessoires similaires ne doit pas contenir de composants métalliques dans son assemblage. L'utilisation d'accessoires qui ne satisfont pas à ces exigences peut ne pas être conforme aux exigences d'exposition aux RF d'ISDE et doit être évitée.