

## PitchCom SystemManual

Welcome to the PitchComSystem-the world's best and most secure baseball communication system.

The PitchCom System consists of two components-a transmitter (also, the "PitchRemote") and a receiver (also, the "PitchCap"). The type of pitch and its location are securely transmitted to the pitcher wearing the receiver, who will hear audio tracks reciting the selected pitch and pitch location (e.g. "fastball low inside).

### **USING THE PITCHCOM SYSTEM-Basic Component Functions**

#### Receiver

The receiver is shown in **Figure 1**. There is an on/volume up button; and off/volume down button; a speaker opening; a micro USB port; and a red LED (not shown) that lights while the receiver is charging.

The on/off buttons turn the receiver on and can easily be felt and pressed. The on button will be closer to the front of the head, the off button will be closer to the back of the head. A short press and release of the on button will turn the receiver on (you will hear "System On"), and a long (3 second) press and hold of the off button will turn the receiver off ("System Off").

Micro USB Port
On/Volup
Off/Voldn
Speaker
Antenna

The same buttons adjust the volume up and down in steps to a comfortable level for the pitcher and fielders. To increase the volume one level, press the on/volume up button once. You will hear the new volume level announced (e.g., "Volume 6"). Depending on the crowd noise conditions, the volume should be increased or decreased accordingly so that the wearer can hear easily, but not a nearby competitor.

As will be explained later, depending on the transmitter mode, the audio tracks will play the type of pitch selected <u>and</u> the pitch location, or just the pitch itself. One of the tracks will also play "cancel" if the catcher cancels the pitch called.



#### **Transmitter**

The transmitter is shown by itself in **Figure 2**. The transmitter does not have an on/off switch, and is always ready to transmit. There are 9 pitch/location buttons, a cancel button, and two catcher volume adjustment buttons. Also, the transmitter has a micro USB port through which the transmitter is charged and can receive firmware upgrades, an antenna wire, and a status LED above the cancel button. A white LED is also provided, whose function will be described below.

The same nine (9) buttons are used to select both the type of pitch ("pitch type") and pitch location ("location"). Currently, the pitches corresponding to buttons 1-9 (as numbered in the photo) are 1-four-seam fastball, 2-curveball, 3-slider, 4-change up, 5-cutter, 6-sinker, 7-splitter, 8-screwball, 9-two-seamfastball. The locations also correspond to the same buttons 1-9, and are arranged in an intuitive pattern. Currently, the locations are 1-high inside, 2-high middle, 3high outside, 4-middle inside, 5-middle middle, 6-middle outside, 7-low inside, 8-low middle, 9-low outside. The wider spacings between buttons 4 and 5 and between buttons 5 and 6 also allow the catcher to instantly know where his thumb is located on the transmitter keypad



Figure 2

without looking.



For pitchers that only want to hear the pitch selection, and not the location, a separate transmitter mode can be used that will send a pitch selection after only one button is pushed. No location is given in this mode. Changing transmitter modes is easy to do and can be done during the game by the catcher.

The transmitter has volume up and volume down buttons which control the volume of the catcher's receiver, since the catcher won't be able to easily control the volume through the cap. Instead, the catcher presses the volume up and the volume down buttons on the transmitter to adjust the volume levels of his receiver.

#### **Calling a Pitch and Location**

To call a pitch, the catcher pushes any one of the buttons 1-9. The white LED light (not shown in **Figure 2**) on the transmitter will light up and stays lit after the first push of a button. No sound will be heard through any receiver after only the first push of a transmitter button. To call a pitch, the catcher pushes any one of the buttons 1-9 again. This second push causes the transmitter to automatically and immediately send out an encrypted signal to each of the receivers. Within milliseconds, the encrypted signal is decoded at each receiver and causes each receiver to play an audio track that announces both the pitch type and the pitch location. As an example, the catcher first pushes button 2 and then button 9. This sends an encrypted signal to each of the receivers. Each receiver decodes this signal and will play "Curveball low outside". Upon pushing the second button, the white LED will turn off.

If the catcher wants to change either the pitch type or location after pushing one or both buttons, he presses the button "cancel". The word "cancel" will be heard in each receiver. If the cancel button is pressed after just one button has been pushed, the transmitter is reset, and the pitch

selection and pitch location can be selected as before. If the cancel button is pressed after both buttons have been pressed and the audio tracks already played in the receivers, the word "cancel" is heard, alerting the players to disregard the called pitch and location, and the catcher then simply calls a new pitch and location.

After the encrypted signal is sent, the transmitter is reset for the next pitch type and location selection. If the pitcher doesn't like the pitch or location, he simply shakes off the sign as normal, asking for a new pitch or location. The catcher only needs to push the buttons again to call the new pitch and location.



#### **PitchCom Transmitter Mode Instructions**

The PitchCom transmitter can be placed into three different modes. A first mode in which the pitch type and pitch location are selected, a second mode in which only the pitch type is selected, and a third mode in which running game signals are called instead of pitches. In the first mode, two button pushes are required, the first selecting the pitch type and the second selecting the pitch location. In the second mode, only one button is pushed to select the pitch type. Similarly, in the third mode, a single button push will select and send the running game signal.

The first mode, in which the pitch type and pitch locations ("Pitch and Location Mode") are transmitted, is entered into by first depressing and holding the cancel and the number 8 button simultaneously. While holding these two buttons down, the 1 button is pushed to set the transmitter into the first mode. The white LED light on the transmitter will blink upon setting this mode. In the Pitch and Location Mode, signals will only be sent after two button pushes, and each receiver will hear a pitch type and a pitch location.

To switch the transmitter into the second mode ("Pitch Only Mode"), depress and briefly hold the cancel and number 8 buttons simultaneously, and while holding these two buttons, press button number 2. buttons 2 and 8. The white LED light on the transmitter will blink upon setting the mode. In the Pitch Only Mode, signals will be sent after a single button push, and each receiver will only hear a pitch type.

To set the transmitter into the third mode, the running game, simply repeat the process, but instead of pushing button 1 or 2, push button 3 while holding down the cancel and number 8 buttons.

Switching back and forth between the pitching modes simply requires depressing the 8 button and either the 1 or 2 button simultaneously. This mode switching functionality allows the signals provided to a pitcher to be in that pitcher's preferred format, i.e., with or without location. We recommend ensuring the transmitter has switched modes by pushing one or two buttons before using it in the game. If it has not switched, simply repeat the process.

## **System Maintenance**

The PitchCom System components are designed to be very low maintenance.

The receivers are charged through theirmicro USB ports. Firmware upgrades and audio tracks are provided through the micro USB ports. Each battery charge should last at least 6 hours of continuous receiver use. We recommend recharging the receivers after each game in which the



units are used. Any micro USB plug and standard wall transformer can be used to charge the receivers.

The catcher transmitter is charged through the micro USB port that is accessible through a hole in the rubber molding on the catcher wristband.



# **PitchCap**

### **FCC Compliance Statement**

CAUTION: The manufacturer is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

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 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.

### **ISED Compliance Statement**

This Class B digital apparatus complies with Canadian ICES-003. Cetappareil numérique de la classe [B] estconforme à la norme NMB-003 du Canada. CAN ICES-003 (B)/NMB-003(B)

# PitchCap Label

JHCF, LLC

PRODUCT NAME: PitchCom PRODUCT MODEL: PitchCap

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.



CAN ICES-003(B)/NMB-003(B)



**Supplier's Declaration of Conformity 47 CFR § 2.1077 Compliance Information** 

**Product Name:** PitchCom **Product Model:** PitchCap

Manufacturer:

JHCF, LLC

6133 E. Exeter Blvd Scottsdale, AZ 85251

craig@pitchcomsports.com

www.pitchcomsports.com

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.



## **PitchRemote**

FCC ID: 2A3O2-PRA

## IC: 27925-PRA

#### **FCC COMPLIANCE STATEMENT**

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.

**CAUTION:** The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

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 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.

### **Canadian Compliance Statement**

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada license-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licencecontenudans le présentappareilestconformeauxCNRd'Innovation, Sciences et Développementéconomique



Canada applicables aux appareils radio exempts de licence. L'exploitationestautorisée aux deux conditions suivantes :

- 1) L'appareil ne doit pas produire de brouillage;
- 2) L'appareildoitacceptertoutbrouillageradioélectriquesubi, mêmesi le brouillageest susceptible d'encompromettre le fonctionnement.