

# COAPT/TASKA<sup>®</sup>

Prosthetist Manual

Motion Control  
division of  
*Fillauer*<sup>®</sup>

# COAPT/TASKA®

## Prosthetist Manual

### Introduction

The introduction of pattern recognition has proven beneficial in controlling multiple degrees of freedom. When combined with multi-digit hands, the functionality of the hand is further increased. Switching from one grip pattern to the next results in natural, life-like fluidity. The high-speed powered thumb rotation of the TASKA hand combined with COAPT results in natural motion and performance never before seen in terminal devices. This brief manual describes the settings and steps necessary to utilize COAPT Complete Control with the TASKA hand for maximal function.

### Special Precautions



In a transradial application there is a COAPT two-pin half moon plug that is identical to the battery plug. Take care that this connection is plugged into the data connection. **Do not** plug power into the data input of the TASKA hand. Damage to the TASKA hand microprocessor could result.



The TASKA hand Bluetooth® **must** be turned OFF. The blue light next to the Bluetooth® icon on the back of the TASKA hand should not be illuminated.

### TASKA Hand Buttons

When using COAPT, grip patterns are directed by COAPT, therefore the hand buttons are not useful to change grip patterns. The buttons do remain active for functions such as turning on/off Bluetooth, turning on/off beeps, and other functions. The lights are also still functional, such as low battery indicator and the warning light.

### Connection Schematic

A wiring schematic is included with the COAPT components. This schematic will differ depending upon the application. Pay careful attention as incorrect connections could result in the system not functioning or damage to the TASKA hand or COAPT system.

### TASKA HandCal Clinicial Settings

COAPT Complete Control automatically sets the User Interface settings. There is no need to connect to the TASKA HandCal Clinician for initial set-up.

### Wireless Connection for COAPT Complete Control Room (CCR)

When using the COAPT/TASKA combination you must ensure that Bluetooth® is turned OFF on the Taska hand. Press and hold the Hand button (button select on dorsal hand) to turn off Bluetooth®. The blue light next to the Bluetooth® icon will no longer be illuminated.

### Connection to COAPT CCR

- Plug in COAPT Communicator dongle
- Power on, wait 10 seconds or until you hear second beep (coming from COAPT software)

### Screens of COAPT CCR

#### Home Screen

- Confirm the Active Profile has TASKA in the title
- Select Left or Right side

#### Inputs Check

- Verify EMG Signals (see COAPT instructions)

## Clinician Control

- Verify output to prosthesis
- Confirm digital communication
  - Press and **hold** hand grips buttons within Clinician Control environment
  - Are grips responding to your selections? If YES, you have digital control!
  - If the hand is **only** closing . . . **confirm** that the COAPT pig tail is plugged into "A" channel of the 6 band coax or wrist rotator

## Troubleshooting

Several problems may occur and to remedy some, connection to the Taska User Interface may be necessary. Refer to "Connection To TASKA HandCal" for correct connection.

### Hand is only closing and/or Grip Patterns are not responding correctly

- One possible cause is reversed polarity. In this case, swap the A-B input cables either at the electrodes or wrist inputs.

### Hand only opens and closes, no grip patterns

- Ensure Bluetooth® is OFF
- Ensure the 2 pin half moon data cable is connected
- Ensure the coaxial plug has 6 bands

### No Hand function

- Check battery connections
- Check battery charge level

### Hand not behaving correctly

- If the TASKA hand warning light is illuminated or a digit isn't functioning correctly, follow the instructions below to connect to HandCal Clinician and perform Hand Diagnostics. Then contact Motion Control.

## Connection to TASKA HandCal Clinician

*NOTE: If you are making any changes within the TASKA software you must follow this sequence **exactly** prior to powering the system back on: (FYI: the only changes that can be made, are Anti-Slip settings, Battery use – Economy or Power, and the ability to run diagnostics)*

1. Power ON (ensure COAPT radio is plugged in)
2. Start CCR (Verify TASKA)
3. Go to Clinician Controls
4. Toggle to SELECT VIRTUAL ARM
5. Turn on TASKA Bluetooth®
6. Leave COAPT CCR open
7. Start Taska software and make necessary changes
8. Save to hand and close Taska software
9. Turn off Bluetooth®
10. Close COAPT software
11. Power cycle prosthesis

\*If you get chattering of the TASKA hand, turn Bluetooth® off and power cycle the prosthesis.

**Calibration** – Recalibrate control as needed

**Practice** – Develop functional control

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