

# DiAs Technical Manual

## CGM Pairing Instructions: Dexcom G4 with Share

Center for Diabetes Technology, University of Virginia

*Supports:*

*DiAs Device Phone: Nexus 5*

*CGM: Dexcom G4 with Share*

*Insulin Pump: Tandem T.Slim or Roche Accu-chek Spirit Combo*

**FOR INVESTIGATIONAL USE ONLY**

# CGM Set Up

## Supplies Needed

- DiAs Phone + charger
- Dexcom G4 CGM with Share + charger

## Navigation

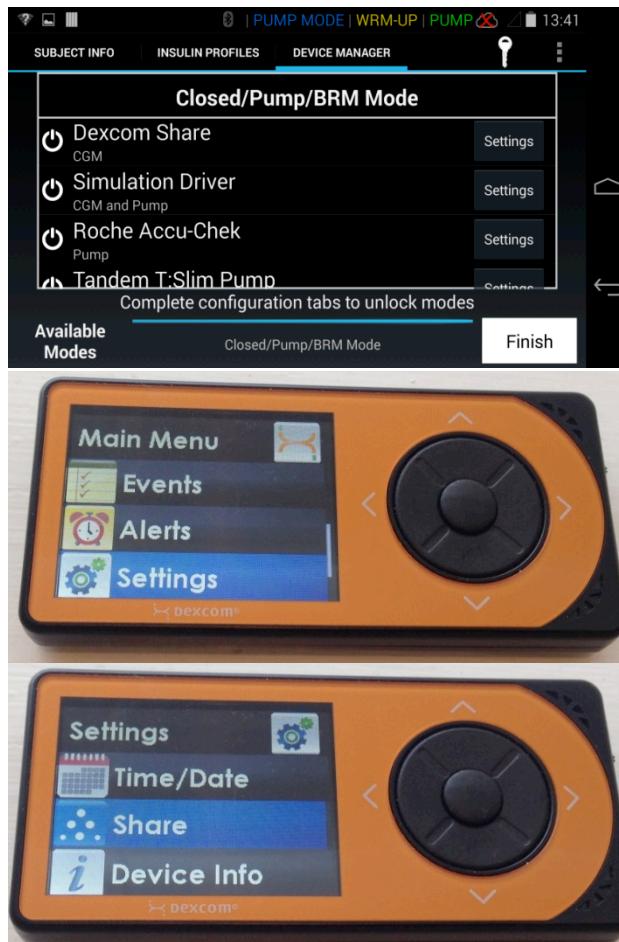
- Use the center button to select buttons and enter items on a menu
- Use the arrow keys to scroll through options (the back arrow will allow you to exit out of menus)

## Set-up

- Change the time on the CGM to the official study time
- Make sure the Dexcom G4 Sensor is inserted, warmed up, and has a valid CGM reading shown the receiver display
  - *Note:* The warm-up period takes 2 hours, after which the CGM will request 2 SMBG calibrations. Pump mode can be used while the CGM is in the warm up period.

# Connecting the CGM

- On the DiAs, navigate to the Device Manager by pressing the menu button and then selecting “Device Manager”
- On the Dexcom Share, press the center button once to wake the screen and a second time to get to the main menu
- Press the down button until you have selected the Settings option, then press the center button to enter the Settings menu
- Inside the Settings Menu, navigate to and enter the Share option
- If there is already a device paired with the Dexcom Share, you will see that it is “On” and a “Forget Device” option is available



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- To delete the pairing, select “Forget Device,” and when the Dexcom Share asks, “Forget Currently Paired Device?” select “OK”
- To turn on the Share, select the On/Off option, then select “On”
- When the Dexcom Share tells you it is ready, select “OK”
- Now on the Dexcom trend graph you will see a flashing Bluetooth symbol between the transmitter and battery icons
- Locate the NFC tag on the back of the Share
- Wake the DiAs and check that it is still on the device manager screen
- Touch the Dexcom’s NFC tag to the back of the DiAs phone near the bottom (over where the phone’s battery is stored)
  - This action is called “swiping” the devices
- Move the tag around slightly until you hear a happy sounding chime
  - A sad sounding chime indicates that you may need to reposition the Dexcom, or that the Dexcom is already paired
- After hearing the chime, watch the Bluetooth icon on the Dexcom Share until it goes solid
  - The icon will (1) continue blinking, (2) go solid for a few seconds, (3) disappear for a few seconds and then (4) remain solid. Once you see the solid icon for the first time, the devices are paired and you can stop watching.
- On the DiAs, exit out of the Device Manager and return to the main screen; it may take several minutes for the CGM icon to change and the data to start transferring to the phone

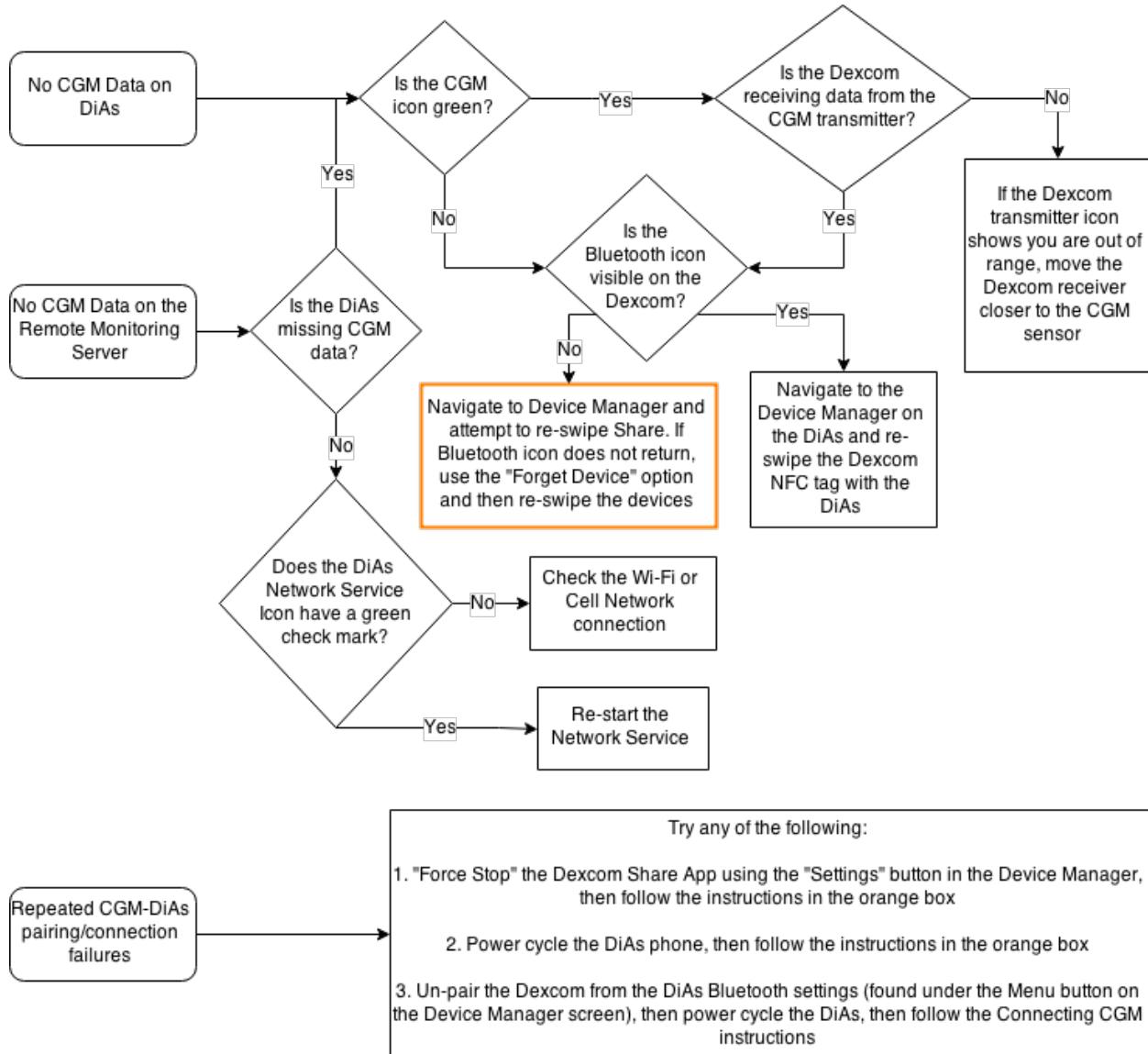


## CGM Icon at top of DiAs screen

- Green- CGM Connected (**CGM**)
- Gray- No CGM connected or paired (**CGM**)

- Yellow- CGM in 2 hour warmup period (**WRM-UP**)

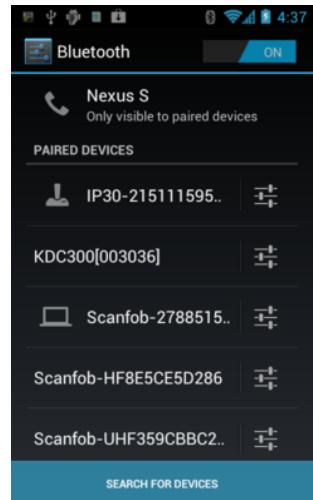
## CGM Troubleshooting



# Dexcom G4 with Share CGM Troubleshooting

## For initial setup (update to MAF 2.41 or fresh install)

- Uninstall the existing DiAs software from the APMMP device (Nexus 5 phone) using the 'uninstallall.py' script.
- Go in the phone's Bluetooth Settings (pictured right) and un-pair any potential paired device.
  - Click the settings button (on the right) in the paired device's row or press and hold the device, then select 'unpair'.
- Restart the phone.
- Install the MAF 2.41-based software on the phone using the 'installall.py' script.
- Set up the system as described by the procedure, starting with the pairing of the Dexcom Share AP before the pairing of the Roche Pump.



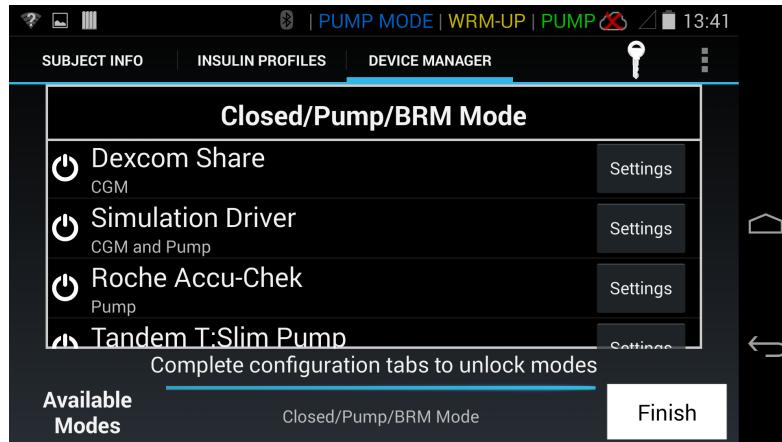
## To reconnect/re-pair the Share to DiAs

If the Dexcom Share is disconnected from DiAs (no incoming CGM values), here is the process to reconnect it:

- Make sure the Share (Bluetooth) is turned on in the receiver's menu.



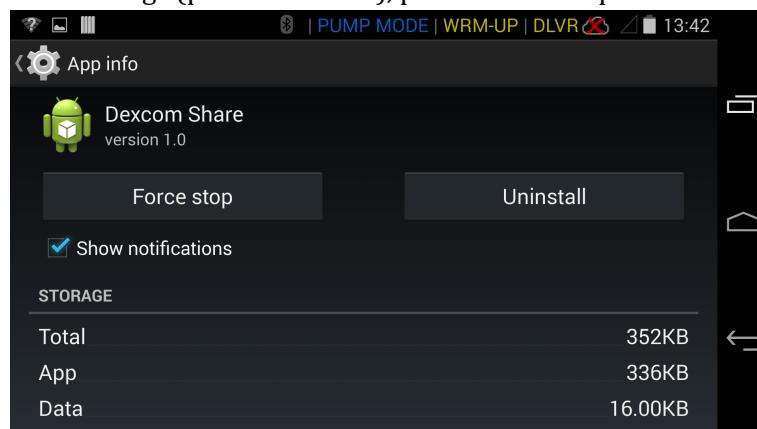
- On DiAs, go to the Device Manager screen (pictured below). Do NOT enter the Dexcom Share Driver.



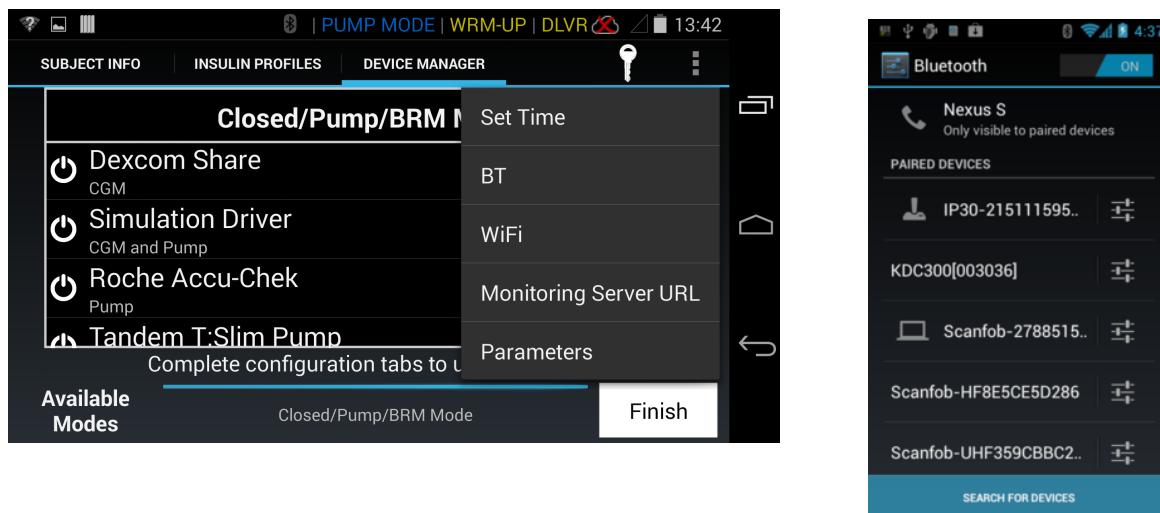
- Swipe the receiver's NFC tag on the back of the phone until you hear the 'positive' chime (make sure the phone's general volume is turned on).
- Wait for a maximum of 5 minutes or until a new CGM value comes in.

If no new CGM value comes in after 5 minutes, proceed to the re-pairing process of the Share, which includes the re-pairing of the Roche Pump as well:

- On DiAs, go to the Device Manager screen.
- Press the 'Setting' button on the Share Driver row
- Inside the driver settings (pictured below), press 'Force Stop' and 'Clear data'.



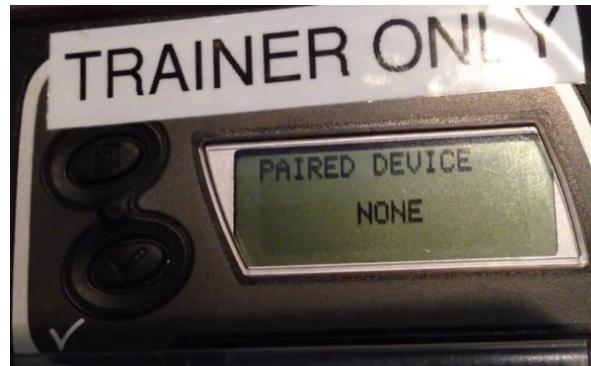
- Hit the 'Back' button to go back to the Device Manager screen.
- Press the 'Setting' button for the Roche Driver
- Inside the driver settings, press 'Force Stop' and 'Clear data'.
- Hit the 'Back' button to go back to the Device Manager screen.
- Press the 'Menu' button of the Device Manager and go to the Bluetooth Settings by selecting the 'BT' item (pictured below).



- Un-pair any device appearing in the 'Paired devices' list.
- On the Dexcom receiver, go to the Share menu and select 'Forget device', confirm, then turn the Share (Bluetooth) functionality back on.



- On the Roche pump, go to the Bluetooth menu and un-pair the previously paired device.



- Restart the DiAs, and re-pair the receiver and pump following the initial setup process, starting with the pairing of the Dexcom Share AP before the pairing of the Roche Pump.