

# **SkyBridge Max**

Quick Start Guide

Dear Amateur Radio Operator,

Welcome to the BridgeCom Community! We are so lucky to have a customer like you!

Join our BridgeCom Facebook group to be part of an active community with over 15,000 members that love to answer technical questions:

https://www.facebook.com/groups/BridgeComSystems

We want you to be successful, so we are including our SkyBridge course in BridgeCom University for FREE!

https://www.bridgecomuniversity.com/

#### **Account Registration and Setup**

Before you begin, you will need:

- 1. A DMR ID
  - a. Register for one at <u>https://www.radioid.net/</u>
- 2. A BrandMeister account
  - a. Register for one at: https://brandmeister.network/
  - b. The account type should be: **Personal User** Account
  - c. Under "Anti Spam" the answer to the question,"What is the wavelength of the UHF band in centimeters?" is: **70**
  - d. After registering with BrandMeister, you will receive an initial confirmation email within a few minutes. Be sure to check your spam folder if you haven't received anything in your inbox.
  - e. You must click the link in the email to begin the registering process.
  - f. It takes a certain amount of time for BrandMeister staff to approve your newly created account. Once it has been approved, you will receive an additional email indicating that your account is active.
  - g. Once your BrandMeister account is active, log in to it, and in the upper right corner of the screen,

click on your callsign. This will open a menu, and next, click **SelfCare**.



h. Scroll down to the section labeled Hotspot
Security and type in a simple alphanumeric
string that you will easily remember. Then click
the Save Password button. A popup will appear
to confirm the setting of this password. You will
need this password later when setting up your
SkyBridge, so be sure to remember it.

Hotspot Security				
Enter new Password				
Save Password				

Note: You may also use other DMR networks with your SkyBridge after registering with them. However, we do not currently offer direct support on this.

## <u>Initial Setup</u>

1. Screw the included antenna into your SkyBridge and plug one end of the provided Ethernet cable into the RJ-45 port on the side. Plug the other end into your network switch/router. The SkyBridge needs an active network connection with internet access to fully boot.



2. Plug the power brick into the wall, plug the large end of the USB-C cable into the power brick, and plug the small end of the cable into your SkyBridge. After displaying a brief splash image, your SkyBridge will display **initializing...** for several seconds.





3. The screen on your SkyBridge will now populate with information. Note the IP address displayed in the upper-left corner. On a computer or smartphone connected to the same local network as the SkyBridge, type this number into your internet browser.



4. You will be directed to the dashboard page as shown below. Click **Configuration**.

WPSD Digital Voice Dashboard for N0CALL					
	(	🌮 Dashboard 🛛 🌐 Simple Vi	iew 🔳 SysInfo 🥊	Vive Caller 🛛 Admir	€ Configuration
RX Freq.	Radio Mode	Modem Firmware	TCXO Freq.	Modem Port	Modem Speed
446.550 MHz	Simplex	SkyBridge:v1.6.1	14.7456 MHz	/dev/ttyAMA0	115,200 bps

5. You will likely be prompted for a username and password. Enter **pi-star** as the username and **raspberry** as the password.

Sign in				
http://192.168.1.249				
Your connection to this site is not private				
Username	pi-star			
Password	••••••			
	Sign in Cancel			

6. If entered correctly, you will be directed to the configuration page. It is recommended to run an update before configuring. Do this by clicking **Update** at the top of the screen. You will be taken to a page with a console output window that will automatically perform the update. Wait until the text indicates that updates are finished.



Scroll to the top of the page and click **Configuration.** 

7. Many of the settings have been pre configured as part of the stock SkyBridge setup and do not need to be adjusted. However, there are settings that need to be configured for each individual. Enter the following:

#### **Under General Configuration:**

- a. Node Callsign: Your callsign
- b. DMR/CCS7 ID: Your DMR ID
- c. Radio Frequency: If using a different frequency, set to the simplex frequency you are using

#### **Under Location and Hotspot Info Settings:**

- d. Town and Country are self-explanatory.
  Latitude: A positive value indicates North, and a negative value indicates South.
  Longitude: A positive value indicates East, and a negative value indicates West.
- e. URL: By default, this is set to your QRZ page. If desired, you can change this to an alternate webpage.

#### **Under MMDVMHost Configuration:**

- f. DMR Mode is turned on by default. If you are not using your hotspot for DMR, turn this off.
- g. Turn on the other digital modes that you will be using. We do not offer direct support on

setting up other digital modes, but there are great resources on the internet that provide guidance on doing this.

#### **Under DMR Configuration:**

- h. For normal use with DMR, DMR Master should be set to **DMRGateway**.
- i. BrandMeister Master should be set to the following:
  - Western US:
    - BM\_3103\_United\_States
  - Central US: BM\_3102\_United\_States
  - Eastern US: BM\_3104\_United\_States
  - Other locations: Set this to a server to the closest geographic location to you. You can find the location of the servers on the BrandMeister website.
- j. BM Hotspot Security: Set this to the password that you set in step 2h in the Account Registration and Setup section of this quickstart guide.

- k. BrandMeister Network ESSID: If you are using multiple hotspots that you want to treat independently, this allows you to use a single DMR ID to accomplish this. If this is the only hotspot you plan on using, leave this set to **None**.
- Enable and configure the other DMR networks you plan on using. BrandMeister is currently the largest DMR network, and currently the only network we offer direct support on configuring. Information on configuring other DMR networks can be found on their respective websites.
- m. DMR Color Code: Unless you are using a code plug configured to a different color code, leave this set to 1.
- n. Node Type: In most cases, this should be set to **Private**. If you want to share this hotspot with others, you will need to enter a comma-separated list of all the DMR IDs in the **DMR Access List** box and click **Apply Changes**. Then you can set the **Node Type** to **Public**. This precaution is put in place to prevent network loops.

- o. Click any of the **Apply Changes** buttons. After several seconds, the screen will refresh.
- p. Click **Dashboard** at the top of the page.
  This will take you to the main dashboard page. If everything is configured correctly, **DMR** and **DMR Net** should now be green as shown below.

Mode Status				
D-Star	DMR			
YSF	P25			
M17	NXDN			
DMR X-Mode	YSF X-Mode			
POC	POCSAG			
Networ	Network Status			
D-Star Net	DMR Net			
YSF Net	P25 Net			
M17 Net	NXDN Net			
M17 Net DMR2NXDN	NXDN Net DMR2YSF			
M17 Net DMR2NXDN YSF2DMR	NXDN Net DMR2YSF YSF2NXDN			
M17 Net DMR2NXDN YSF2DMR YSF2P25	NXDN Net DMR2YSF YSF2NXDN APRS Net			

i. If **DMR Net** is red, there is likely an invalid DMR ID entered.

- ii. At the bottom of the page, if the entry under DMR Master is red, there is likely a mismatch between your
  BrandMeister hotspot security password (set in step 2h in the Account
  Registration and Setup section of this quickstart guide), and the password you entered (step 7j in this section of this quickstart guide). Revisit these steps to be sure the passwords match.
- q. You are now ready to perform a Parrot test and make contacts!
  - A Parrot test is not necessary, but it verifies that everything is set up correctly, and that audio quality is desirable. To perform a parrot test, simply initiate a private call to ID 9990 on timeslot 2 with your radio. If you purchased a code plug or a Plug and Play Package from us, a channel for this is already built in.

#### **Proper Shutdown Procedure**

The SkyBridge is a computer with an OS running on it. Therefore, simply pulling the power plug without properly shutting it down may cause file corruption.

- 1. Follow steps 3-5 in the **Initial Setup** section of this quickstart guide to log in to your SkyBridge.
- 2. Click **Power** at the top of the page.



3. Click the button under **Shutdown** and wait 60 seconds before unplugging your SkyBridge.

🚯 Dashboard	😵 Live Caller	<b>O</b> Admin	C Update	Backup/Restore	₽ Configuration
Power					
		:	Shutdow	n	
			U		

### **WiFi Configuration**

The SkyBridge can be configured to connect to the internet through a WiFi connection. To set this up, follow the steps below.

- 1. Follow steps 3-5 in the **Initial Setup** section of this quickstart guide to log in to your SkyBridge.
- 2. Scroll down to **Wireless Configuration** and click the **Configure WiFi** button.



3. If the WiFi connection is active, and the SkyBridge is within range of it, click the **Scan for Networks (10 secs)** button. This will take 10 seconds to scan for available networks nearby. Click the **Select** button next to your network name. This will cause a network to appear at the top. If configuring your wireless network manually, click the **Add Network** button to manually type it.

Scan for	etworks (10 secs) Add New WiFi Network			
Connect	ssid	Channel	Signal	
Select		5.0GHz Ch52	-66 dBm	WP
Select		5.0GHz Ch132	-69 dBm	WP
Select		2.4GHz Ch6	-53 dBm	[WF
Select		2 ACU- Chc	EC dBm	MD

WiFi Info				
WiFi Regulatory Domain (Country Code) : US	~			
Network 0 Delete				
SSID :				
PSK	Save This Network			
Scan for Networks (10 secs) Add New WiFi Network				

- 4. Be sure the Country Code matches your country and enter the password for your WiFi connection in the **PSK** field. Once this is complete, click **Save This Network**.
- 5. This will store the network. To connect to it, you will need to reboot your SkyBridge and unplug the Ethernet cable while it is rebooting so that it will use the WiFi connection. To do this:

- a. Scroll to the top of the page and click **Power**.
- b. Click the button under **Reboot**.
- c. A message will appear indicating that your Hotspot is rebooting.



- d. Note that your IP address will change once connected to the WiFi network, so you will need to look at your SkyBridge screen to determine the new IP address. You will be able to log in to your SkyBridge from a computer connected to the same WiFi network as the SkyBridge. (This includes your smartphone if using it to supply a WiFi connection.)
- 6. Repeat steps 1-4 in this section for each WiFi network.

# For further support, create a ticket on our support page at the following link:

https://support.bridgecomsystems.com/kb-tickets/new