

Package Contents

If you ordered Phantom II part number:

- 260-5099-200 Phantom II Basic Unit
- 260-5099-201 Phantom II Class 1 Div 2 Unit

Your package contains:

- (1) Phantom II Wireless IP Modem
- (1) Product Documentation Card
- This Quick Start Guide

If you ordered Phantom II part number:

- 250-5099-210 2 Piece Demo Kit

Your package contains:

- (2) Phantom II Wireless IP Modem
- (2) 5’ 16 AWG Stranded Teflon Wire (Red & Black)
- (2) 60” CAT-5 Ethernet Cable
- (2) 120 VAC to 13.8 VDC 4 Amp Power Supply
- (2) 900 MHz Flex Rubber Duck Antenna
- (1) Product Documentation Card
- This Quick Start Guide

If you ordered Phantom II part number:

- 250-5099-211 3 Piece Demo Kit

Your package contains:

- (3) Phantom II Wireless IP Modem
- (3) 5’ 16 AWG Stranded Teflon Wire (Red & Black)
- (3) 60” CAT-5 Ethernet Cable
- (3) 120 VAC to 13.8 VDC 4 Amp Power Supply
- (3) 900 MHz Flex Rubber Duck Antenna
- (1) Product Documentation Card
- This Quick Start Guide

- Phantom II Wireless IP Modem
- Product Documentation Card
- 120 VAC to 13.8 VDC 4 Amp Power Supply
- 900 MHz Flex Rubber Duck Antenna
- 5’ 16 AWG Stranded Teflon Wire (Red & Black)
- 60” CAT-5 Ethernet Cable
- Quick Start Guide



Quick Start Guide

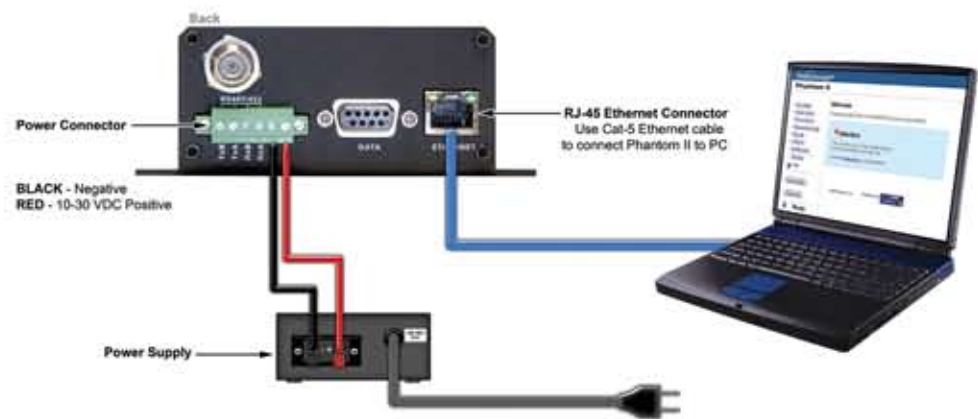
Phantom II
FHSS IP MODEM FOR UNLICENSED SPECTRUM



This Quick Start Guide will enable you to promptly establish basic IP connectivity between a pair of Phantom II modems in a point-to-point configuration.



Programming Option 1 - Web Interface



REQUIREMENTS

To Program your Phantom II using the web interface, you will need:

- At least (2) two Phantom II (factory configured) with Power Adapter and Rubber Ducky Antenna. Each factory configured Phantom II has the following default settings: ‘Remote’ with Local Network Settings ‘Static’ (IP Address 192.168.1.254, Subnet Mask 255.255.255.0, Gateway 192.168.1.1)
- PC with NIC (Ethernet) card
- Ethernet cable. If your PC does not support Auto MDIX, you will need to use a crossover cable

DEVICE CONNECTIONS

- Connect Rubber Ducky to the antenna port of each Phantom II
- Connect power adapters to 120 VAC outlets and to each Phantom II
- Using an Ethernet cable, connect the Phantom II that will be the MASTER device to the PC NIC

CONNECTING TO THE PHANTOM II WEB INTERFACE

- Open a Web Browser and enter the IP Address of the Phantom II into the URL address line
- Press **[Enter]**
- A login window will appear. Enter default user name **(admin)** and default password **(admin)**
- Press **[Enter]**

MASTER CONFIGURATION

- Select Network Configuration > Local IP Config. Assign unit IP Address, Subnet Mask and Gateway. Press **[Submit]**

NOTE: If the Local IP Address of the Phantom II is changed to a new network, the PC NIC IP Address must also be reassigned to the new network.

- Open a Web Browser and enter the newly assigned IP Address of the Phantom II into the URL address line
- A login window will appear. Enter admin for the default username. Enter admin for the default password. Press **[Enter]**
- Select Radio Configuration
- Select Master as the Operation Mode
- Select Point-to-Point as the Network Type. Press **[Submit]**

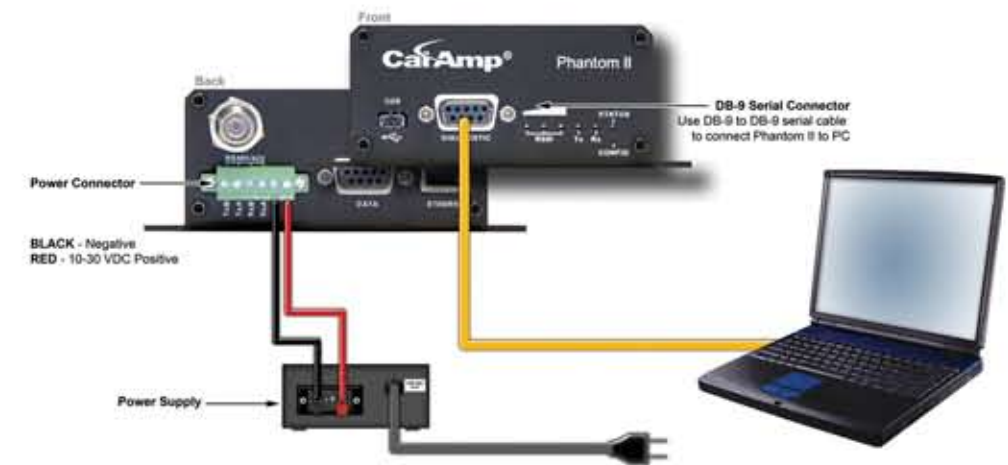
REMOTE CONFIGURATION

- Repeat the above for the other Phantom II, giving it a new unique IP Address. By default the Operation Mode is already configured as a Remote
- Change the Destination Unit on the Master radio to match the Unit Address of the Remote radio. Press **[Submit]**

CHECK CONNECTIVITY

- With both units powered-on, in proximity to each other, their RSSI LEDs should be illuminated
- With the PC connected to one of the Phantom II units with an Ethernet cable, open a web browser and enter the IP Address of ‘the other’ unit to verify a wireless connection
- To simulate data traffic over the radio network, connect a PC to the Ethernet port of the Phantom II and PING each unit in the network multiple times

Programming Option 2 - Text Interface



REQUIREMENTS

To program your Phantom II using the text interface, you will need:

- At least (2) two Phantom II (factory configured) with Power Adapter and Rubber Ducky Antenna. Each factory configured Phantom II has the following default settings: ‘Remote’ with Local Network Settings ‘Static’ (IP Address 192.168.1.254, Subnet Mask 255.255.255.0, Gateway 192.168.1.1)
- PC with NIC (Ethernet) card and COM (serial) port with HyperTerminal (or equivalent). If your PC does not have a Serial port, you will need a serial to USB adapter
- Diagnostic serial cable (DB9-DB9)
- Ethernet cable. If your PC does not support Auto MDIX, you will need to use a crossover cable

DEVICE CONNECTIONS

- Connect Rubber Ducky to the antenna port of each Phantom II
- Connect power adapters to 120 VAC outlets and to each Phantom II
- Using a diagnostic serial cable, connect the DIAGNOSTICS port of the Phantom II that will be the MASTER device to an available COM port on the PC

SERIAL CONFIGURATION

- Run HyperTerminal (or equivalent terminal program) on the PC and configure the selected Serial/COM port for 115200 bps, 8 data bits, no parity, 1 stop bit, and no flow control
- Activate the HyperTerminal connection. Press **[Enter]**. A login prompt will appear
- Enter default user name **(admin)**. Press **[Enter]**
- Enter default password **(admin)**. Press **[Enter]**

MASTER CONFIGURATION

- Select **[B]** Network Configuration
- Select **[A]** Local IP Config
- Select **[B]** Enter IP Address
- Select **[C]** Enter Subnet Mask
- Select **[D]** Enter IP Gateway; Press **[Enter]**
- Press **[U]** to SAVE the configuration changes
- Press **[Esc]** twice to return to the MAIN MENU
- Select **[C]** Radio Configuration
- Select **[B]** Operation Mode
- Select **[A]** Master
- Select **[I]** Network Type
- Select **[B]** Point-to-Point
- Select **[J]** Destination Unit. Enter the number **20**. Press **[Enter]**
- Press **[U]** to SAVE the configuration changes
- Press **[Esc]** to return to the MAIN MENU
- Press **[Q]** to Quit

REMOTE CONFIGURATION

Remove the Serial connection from the MASTER device and connect it to the next Phantom II.

- Press **[Enter]** to open the log in prompt
- Enter default user name **(admin)**. Press **[Enter]**
- Enter default password **(admin)**. Press **[Enter]**
- Select **[B]** Network Configuration
- Select **[A]** Local IP Config
- Select **[B]** Enter IP Address
- Select **[C]** Enter Subnet Mask
- Select **[D]** Enter IP Gateway. Press **[Enter]**
- Press **[U]** SAVE the configuration changes
- Press **[Esc]** twice to return to the MAIN MENU
- Select **[C]** Radio Configuration
- Select **[F]** Unit Address. Enter the number **20**. Press **[Enter]**
- Select **[I]** Network Type
- Select **[B]** Point-to-Point
- Press **[U]** to SAVE the configuration changes
- Press **[Esc]** to return to the MAIN MENU
- Press **[Q]** to Quit

CHECK CONNECTIVITY

- With both units powered-on, in proximity to each other, their RSSI LEDs should be illuminated
- With the PC connected to one of the Phantom II units with an Ethernet cable, open a web browser and enter the IP Address of ‘the other’ unit to verify a wireless connection
- To simulate data traffic over the radio network, connect a PC to the Ethernet port of the Phantom II and PING each unit in the network multiple times