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Wireless Transceiver Upgrade Instructions for AlphaEclipse 3600 Signs

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Locus OS2400-232
2.4GHz wireless transceiver

Alpha RF900
900MHz wireless transceiver

MaxStream XTend-PKG
900MHz wireless transceiver

Contents

Adaptive Micro Systems • 7840 North 86th Street • Milwaukee, WI 53224 USA • 414-357-2020 • 414-357-2029 (fax) • http://www.adaptivedisplays.com

August 16, 2005

9711-8032A

Introduction

Purpose

These instructions explain how to add a wireless transceiver to an AlphaEclipse 3600 sign. There are three wireless transceiver options:

- Locus OS2400-232
- Alpha RF900
- MaxStream XTend-PKG

Two wireless transceivers are required to communicate with an AlphaEclipse 3600 sign — one transceiver installed inside the sign and another attached to a computer with AlphaNET software installed.

Revision history

Revision	Date	Notes
9711-8032	December 6, 2004	First release.
9711-8032A	August 16, 2005	Added MaxStream XTend Transceiver. Removed MaxStream XStream Transceiver.

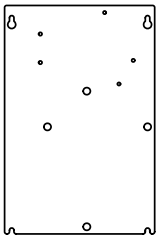
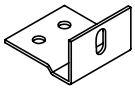
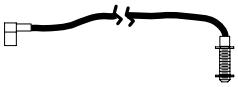
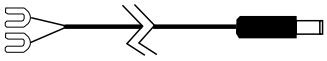
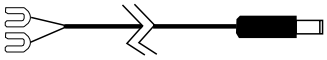
Related documentation

Part #	Manual title	Description
Manuals (http://www.adaptivedisplays.com/manuals/)		
9711-8001	AlphaEclipse 3600 Sign Installation Instructions	Describes the electro-mechanical installation of AlphaEclipse 3600 signs as well as contains information on sign interconnection and networking.
9708-8081	AlphaNET 3.0 User Manual	Describes the software used to send messages to an AlphaEclipse sign.
TechMemos (http://www.adaptivedisplays.com/ams/dtechmemo.htm)		
00-0005	Preventing Electrostatic Discharge (ESD) Damage	Explains the dangers associated with electrostatic discharge damage and how it can be prevented by following static control procedures.

Preventing electrostatic discharge damage

This equipment contains components that may be damaged by "static electricity", or electrostatic discharge. To prevent this from happening, be sure to follow the guidelines in Adaptive Tech Memo 00-0005, *"Preventing Electrostatic Discharge (ESD) Damage,"* available on our Web site at http://www.adaptivedisplays.com.

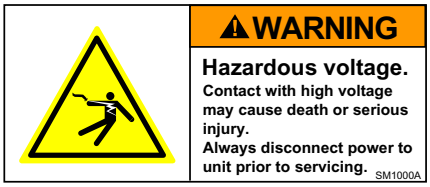
Required material

Material				Wireless transceiver (X = required part)		
Item	**Part #**	**Description**	**Illustration**	**Locus OS2400-232 (pn 1088-9307B)**	**Alpha RF900e (pn 1211-2214)**	**MaxStream XTend-PKG (pn 1088-9506)**
1	6811-8089	Accessory plate		X	X	X
2	6506-0004	Velcro		X	X	X
3	6506-0005					
4	1160-9009A	Coax cable, 20 feet		X	X	X
5	6811-6117	Antenna bracket		X	X	X
6	1180-9034	Coax cable, 4 feet		X	X	X
7	6310-0008	Tie wrap, 8-inch		X	X	X
8	6310-1059	Tie wrap pad, 3/4-inch		X	X	X
9	6811-7076	Latch key		X	X	X
10	1211-9201	900MHz antenna	These three antennas look very similar: • *Only* use the 900MHz (pn 1211-9201) with the RF900e transceiver. • *Only* use the 2.4 GHz antenna (pn 1088-9308A) with the Locus transceiver. • *Only* use the MaxStream antenna with the MaxStream transceiver.		X	
11	1088-9308A	2.4GHz antenna		X		
12	—	MaxStream antenna (included with transceiver)				X
13	7120-0301	DB9 male-to-3-conductor cable		X		X
14	7122-0288	Locus power cable		X		
15	7122-0205LF	MaxStream XTend power cable				X

Open the AlphaEclipse 3600 sign

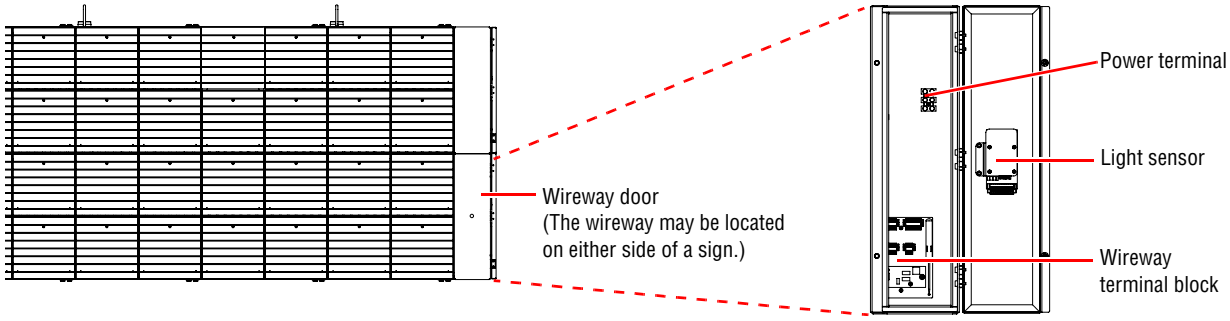
Remove power from the AlphaEclipse 3600 sign

1. Remove power from the sign.



Open the wireway on the AlphaEclipse 3600 sign

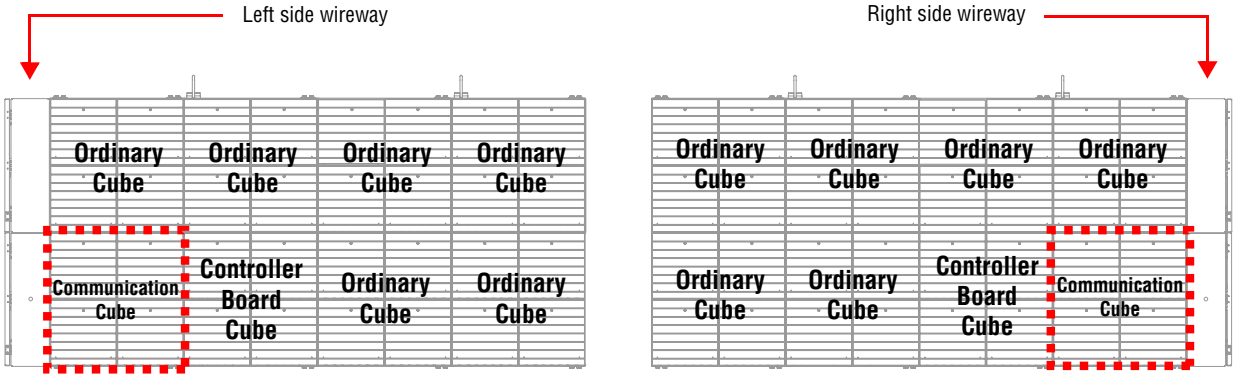
2. Using a 5/32-inch hex key, open the wireway door on the bottom row of cubes:



Open the communication cube on the AlphaEclipse 3600 sign

3. The communication cube (dashed line below) location depends on where the sign's wireway is located:

Shown below is a 64 x 32 pixel sign. Other sign sizes are similar.



4. Open the communication cube using one of the following two methods:

   - From the back (preferred method):

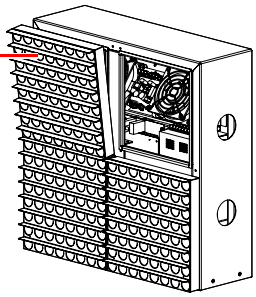
To open the back of a cube, use a 5/32-inch hex tool (pn 6811-6061) to loosen each of the two door screws.

   - From the front:

To remove an LED driver board:

- Insert a 5/32-inch hex tool into the latch at the upper center of each board.
- Turn the hex tool counterclockwise.
- Lift the board up and then pull it back.
- Remove the data and power connectors from the back of the LED driver board.

Each LED driver board must be put back in its *original* location. *LED driver boards are not interchangeable.*



5. If a modem, fiber optic transceiver, or another wireless transceiver is present in the sign, remove it:

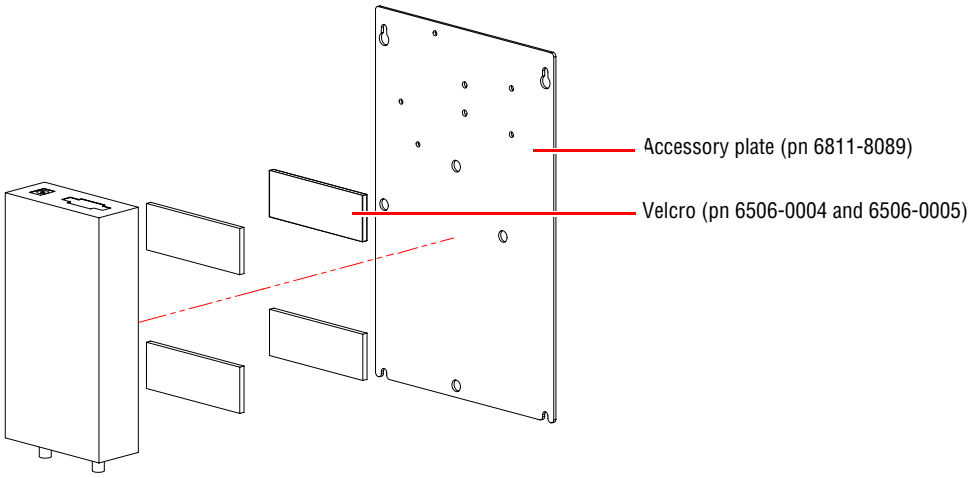
   - Disconnect power from the device.
   - Disconnect communication wires from the device.
   - Remove the device from the sign.

Upgrade instructions

Locus OS2400-232 2.4GHz wireless transceiver

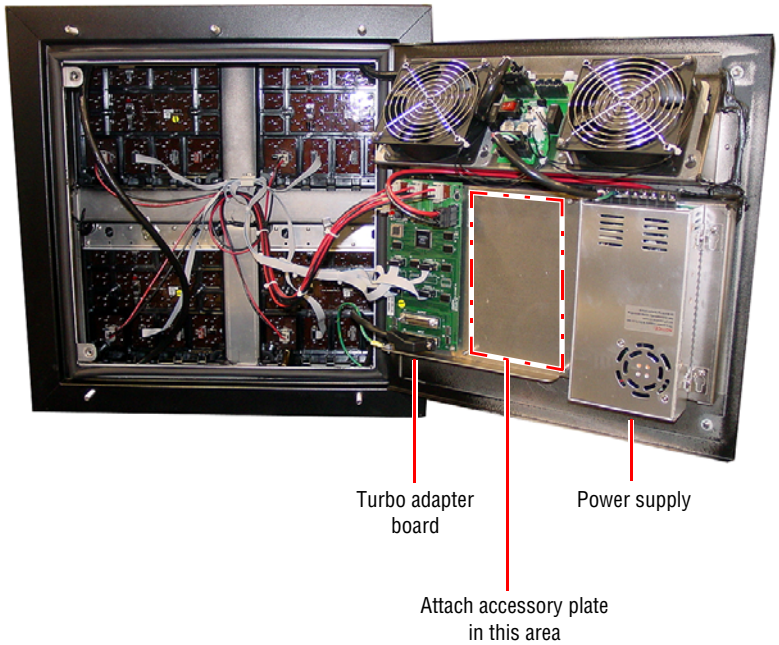
Fasten the wireless transceiver to the accessory plate

1. Use Velcro strips to attach the transceiver to the accessory plate:

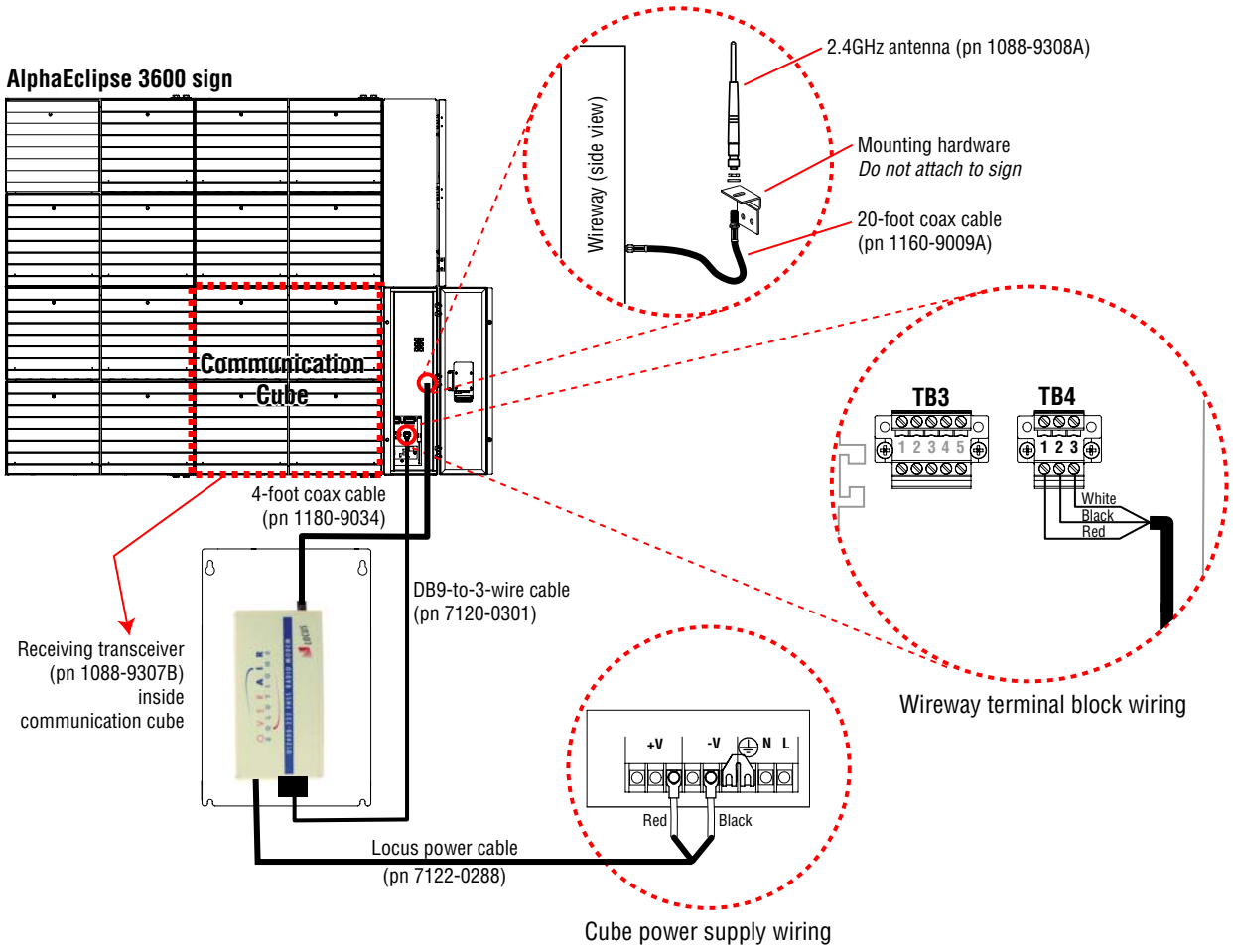


Install the Locus OS2400-232 in the AlphaEclipse 3600 sign

2. Attach the accessory plate inside the AlphaEclipse 3600 communication cube:



3. Wire the Locus OS2400-232 to the sign as shown below:



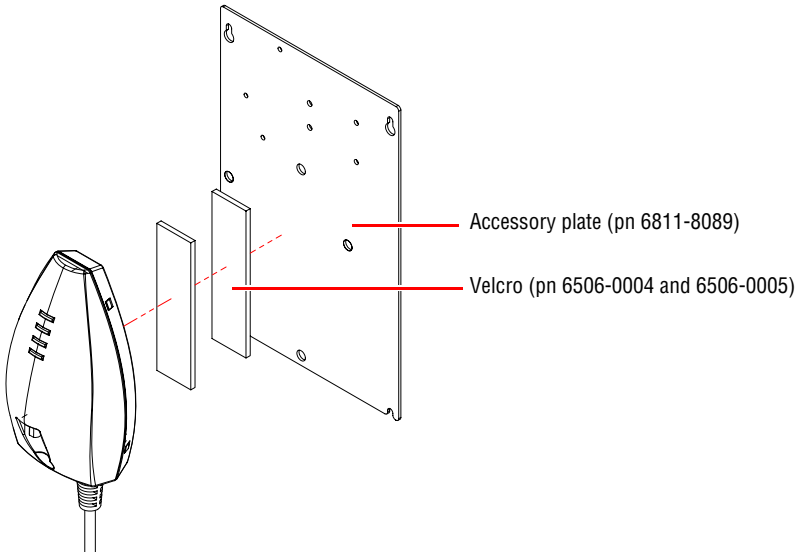
Close the sign and test the wireless connection

4. Close the sign.
5. Apply power to the sign.
6. Set up the transmitting Locus OS2400-232 on a computer.
7. Send a test message to the sign using AlphaNET software.

Alpha RF900 900MHz wireless transceiver

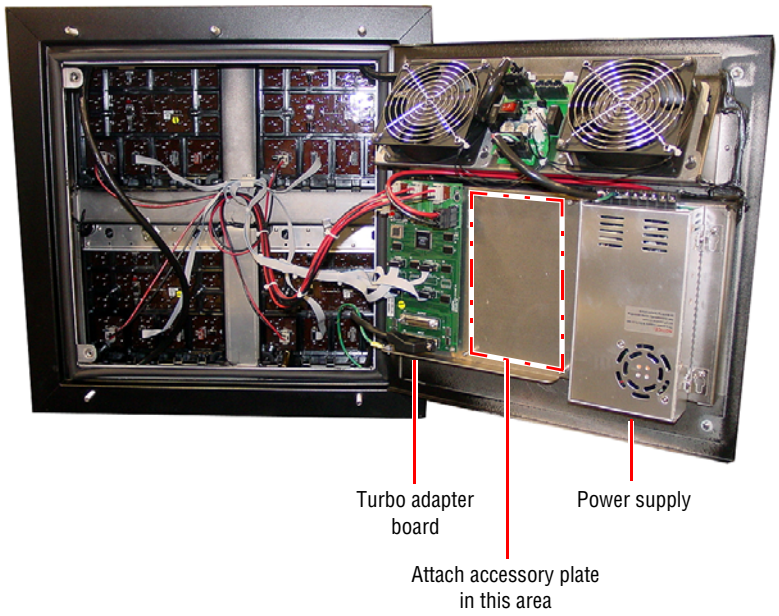
Fasten the wireless transceiver to the accessory plate

1. Use Velcro strips to attach the transceiver to the accessory plate:

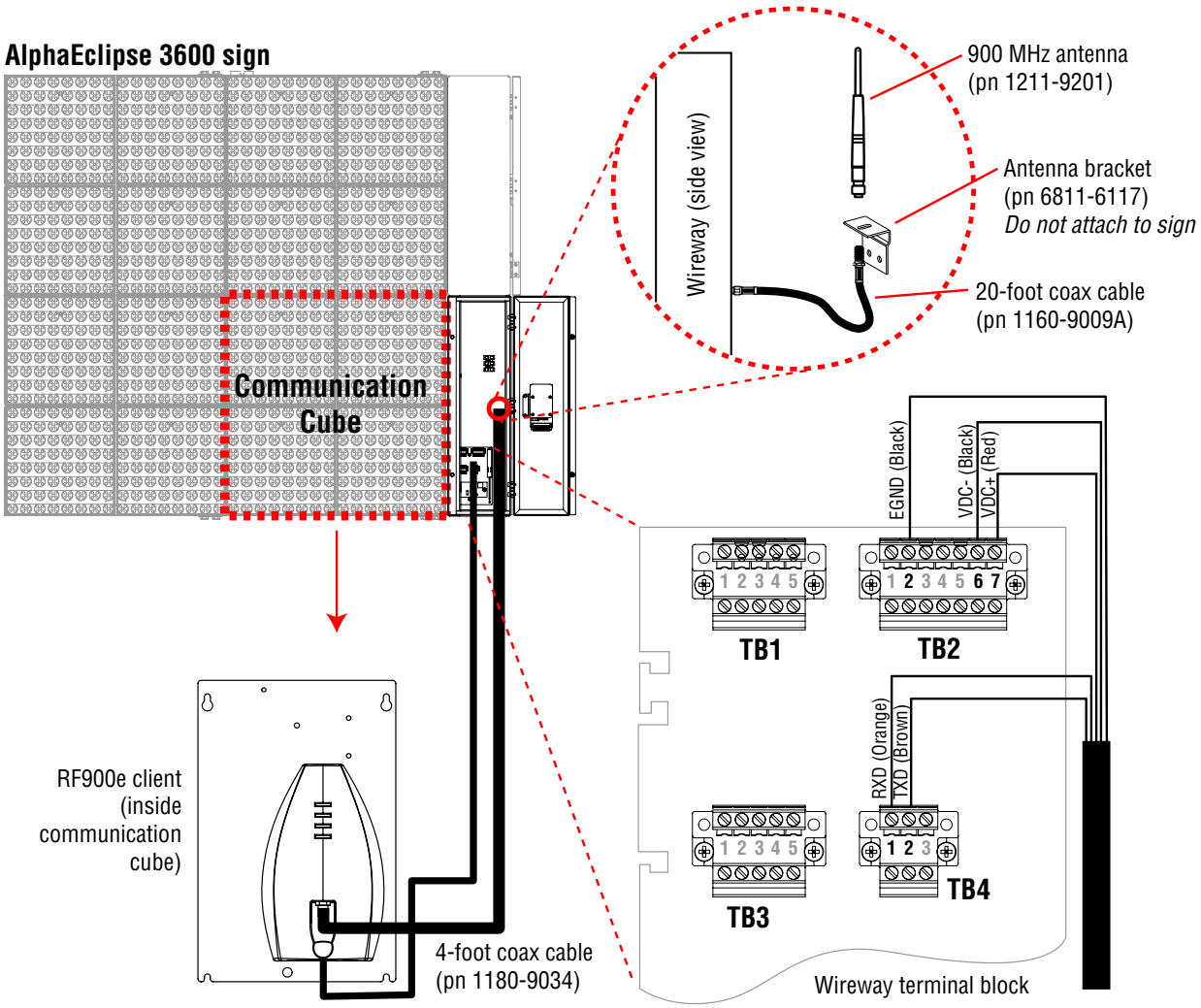


Install the Alpha RF900e in the AlphaEclipse 3600 sign

2. Attach the accessory plate inside the AlphaEclipse 3600 communication cube:



3. Wire the Alpha RF900e to the sign as shown below:



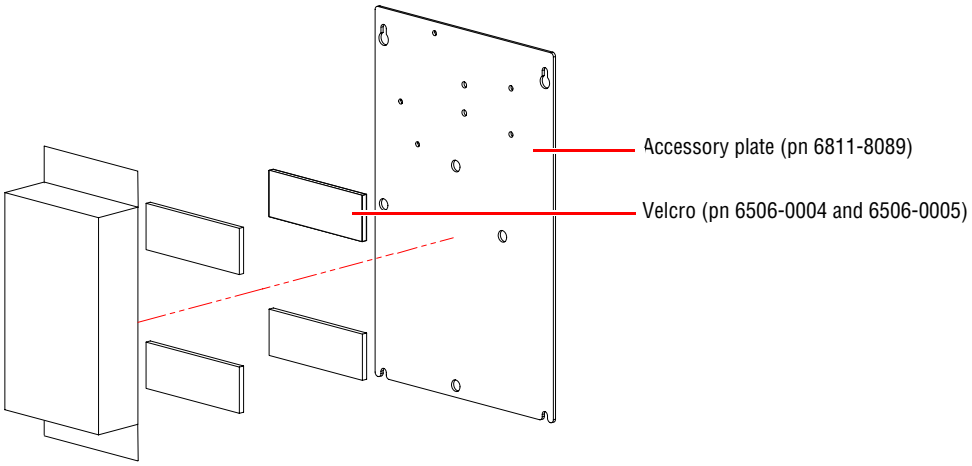
Close the sign and test the wireless connection

4. Close the sign.
5. Apply power to the sign.
6. Set up the Alpha RF900 server on a computer.
7. Send a test message to the sign using AlphaNET software.

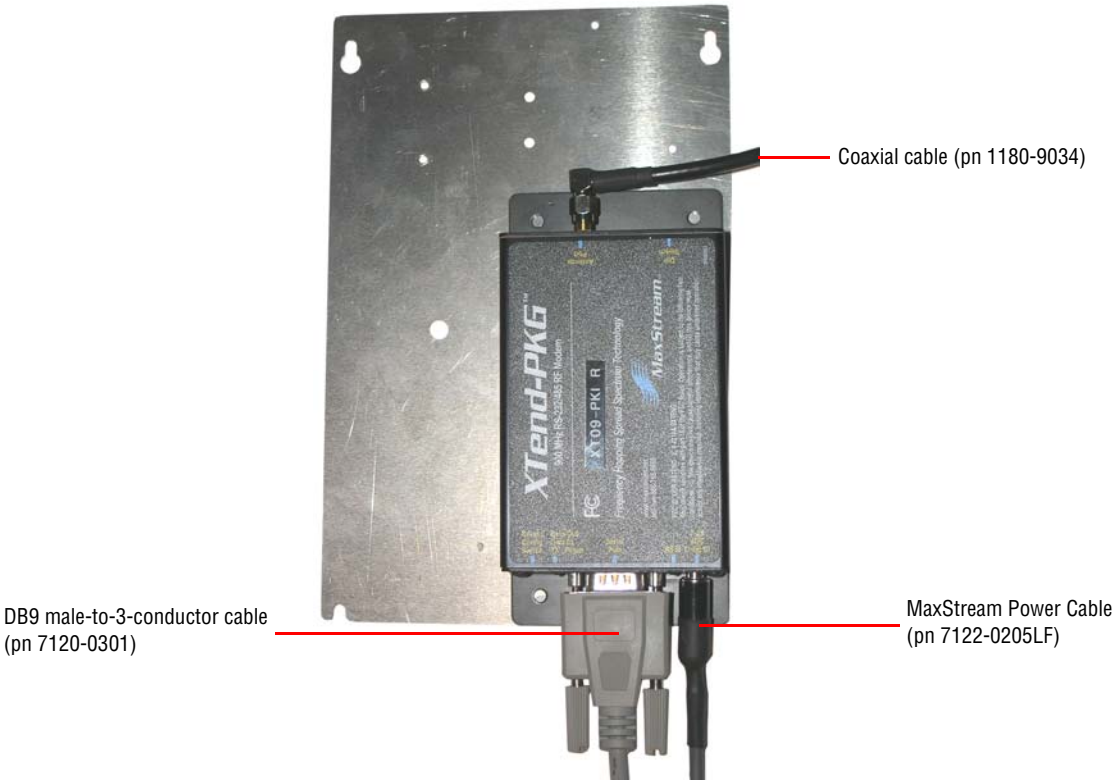
MaxStream XTend-PKG 900MHz wireless transceiver

Fasten the wireless transceiver to the accessory plate

1. Use Velcro strips to attach the transceiver to the accessory plate:

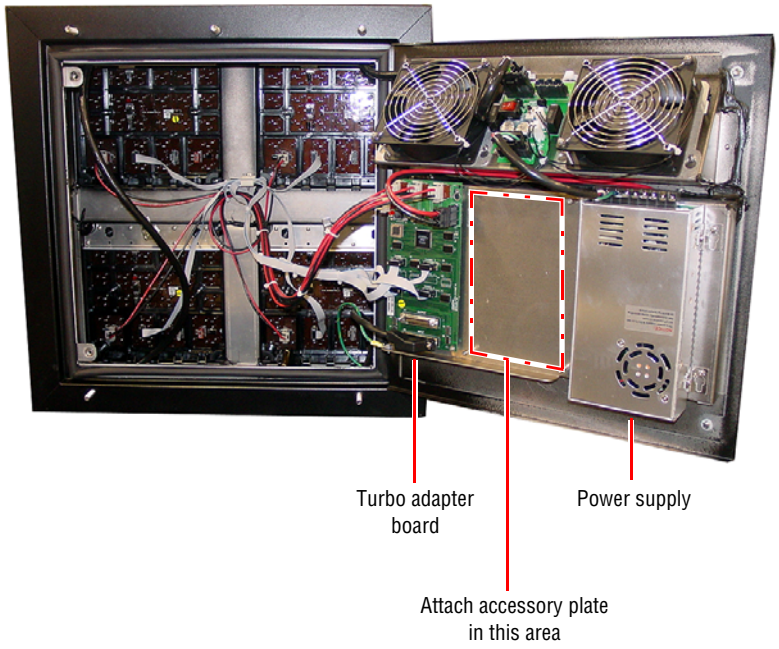


2. Assemble the external power supply holder and fasten it to the accessory plate:

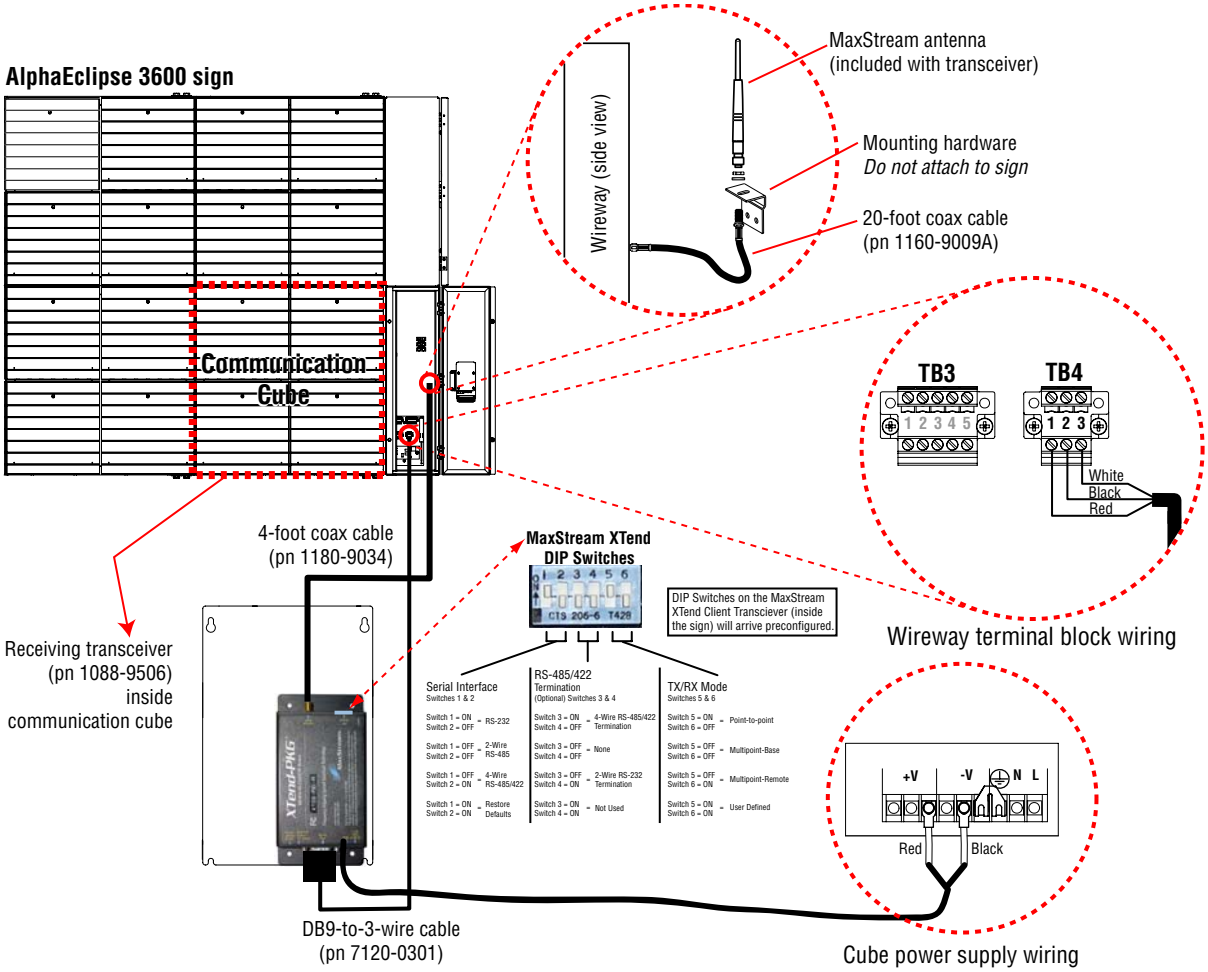


Install the MaxStream XTend-PKG in the AlphaEclipse 3600 sign

3. Attach the accessory plate inside the AlphaEclipse 3600 communication cube:



4. Wire the MaxStream XTend-PKG to the sign as shown below:



Close the sign and test the wireless connection

5. Close the sign.
6. Apply power to the sign.
7. Set up the transmitting MaxStream XTend-PKG transceiver on a computer.
8. Send a test message to the sign using AlphaNET software.