



Broadcast Electronics Inc.

4100 North 24th Street, Quincy, Illinois 62305 USA • Phone (217) 224-9600 • Fax (217) 224-9607 • www.bdcast.com • bdcast@bdcast.com



STX Combiner Replacement Application Guide

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STX Combiner Replacement Application Guide

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1 STX Combiner Replacement

1.1 Overview of the removal and installation of the STX combiner

Replacing the STX combiner is a straight forward procedure. No adjustments to the transmitter system are required.

2 Preparation

2.1 Overview / Estimated Completion Time

The replacement of the STX combiner will take about 45 minutes. The procedure is the same for STX-2, STX-3 and STX-5 combiners with the only difference being the number of cables to be disconnected and reconnected.

2.2 Items / Tools required for the Replacement Process

- No. 2 Phillips Screwdriver
- 3/16" flat blade screw driver
- 5/16" nut driver

3 Software Requirements

Note that prior to replacing the STX LP combiner, the STX LP controller software must be upgraded to version 2.0 or greater. Failure to update the controller software to version 2.0 or greater will result in combiner faults that will prevent the transmitter from operating.

4 Replacement of the STX Combiner



WARNING: ENSURE ALL PRIMARY POWER IS DISCONNECTED BEFORE PROCEEDING.

4.1 Power unit OFF.

Step 1 – Power unit OFF and disconnect all transmitter primary power.

4.2 Disconnect AC wiring at rear of combiner.

Step 2 – Note the wire orientation on a piece of paper or on this application guide for re-assembly.



Figure 1. Rear of combiner.

Step 3 – Remove High Voltage safety cover using a #2 Philips screwdriver.



Figure 2. Remove wiring

Step 4 – Using a 3/16" flat blade screwdriver, loosen the screws holding the wires in the back of the combiner.

Step 5 – Remove the ground wire from the ground stud using a 5/16" nut driver.

4.3 Disconnect RF transmission line

Step 6 – Use the 5/16" nut driver to loosen the band clamp on the output slip flange and remove transmission line or elbow. You may have to remove or move other transmission line pieces to allow line removal from flange.

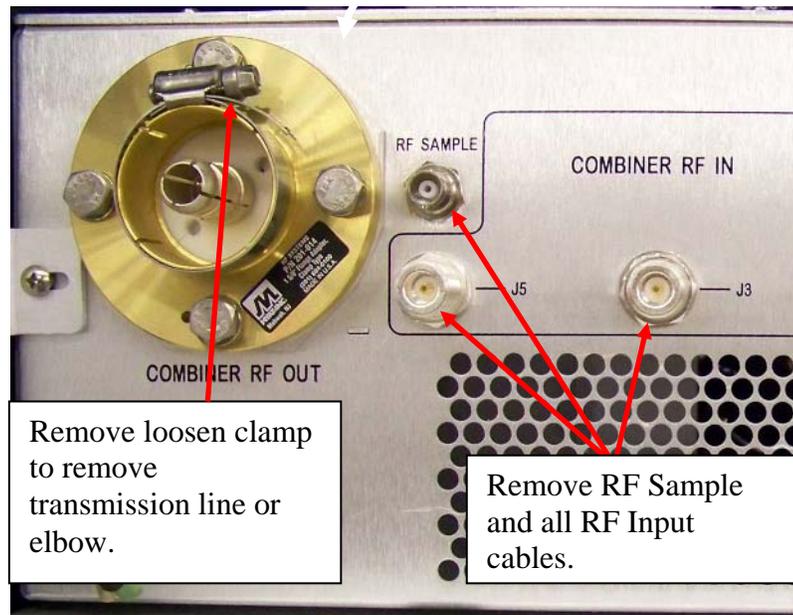


Figure 5. Remove transmission line and RF cables

Step 7 – Disconnect RF Sample cable if used, from BNC connector.

Step 8 – Note the RF Input cable orientation on a piece of paper or on this application guide for re-assembly.

Step 9 – Remove all RF Combiner Input cables from J1 – J5. Depending on which combiner you have there will be 2, 3 or 5 RF input cables.

Step 10 – Remove the Ethernet Control cable from the RJ45 connector on the rear of the combiner depressing the tab on the bottom.



Figure 6. Remove Ethernet and BNC cables.

Step 11 – Note the RF Splitter input and output cable orientations on a piece of paper or on this application guide for re-assembly.

Step 12 – Remove the Splitter RF input and output cables.

4.4 Mechanical Disassembly

Step 13 – Remove the two #2 Philips screws from the brackets on the back of the combiner.



Figure 7. Remove bracket screws.

Step 14 – From the front of the combiner, remove the four rack screws using the appropriate tool for the fastener used.

Step 15 – Slide the combiner out the front of the rack. You may need to remove any filler panels above or below the combiner to allow easier removal.

Step 16 – Install the new combiner into the same location as the old combiner and assemble in the reverse order.

5 RF Technical Services Contact Information

RF Technical Services -

Telephone: (217) 224-9617

E-Mail: rfservice@bdcast.com

Fax: (217) 224-6258

Web: www.bdcast.com

