

# G.703/E1 Miniature Baluns

## Connect-IT 460, 460MC & 465 G.703 Balun



Now You Can Solve Mismatches Between Coax and Twisted Pair G.703 Terminations!

### Overview

The Patton Model 460 series baluns are miniature G.703 baluns that allows 75 ohm coax hardware to communicate with 120 ohm twisted pair equipment. The Model 460 specifically addresses the ONP requirement that European PTTs offer 120 ohm twisted pair terminations to their customers. Some PTTs and private carriers are standardized on 75 ohm coax, or have customers whose CPE has only 75 ohm coax connections. The Model 460 presents a ready solution to this termination mismatch. Supporting E1 data rates to 2.048 Mbps, the Model 460 receives 75 ohm signals and converts them to 120 ohm for transmission over a network or reception by a CPE. The signals output by the Model 460 are scaled to match the pulse shape requirements specified by the CCITT G.703 standard. The Model 460 can perform 120 ohm to 75 ohm signal conversion as well, giving the device a dual role



### Features

- Data Rates to 2.048 Mbps
- 75 Ohm Dual Coax to 120 Ohm Twisted Pair
- Bi-Directional Signal Conversion
- No AC Power or Batteries Needed
- **(Model 460)** Male or Female Coax BNC Connectors
- **(Model 460MC)** Male or Female Coax BNC Connectors with Built-in Cables
- **(Model 465)** Male or Female Coax 1.6/5.6 Connectors
- Ultra-Miniature Enclosure
- **Made in the USA**— This Patton equipment is designed by Patton engineers and built in our Gaithersburg, Maryland facility. Patton's American-made manufacturing process delivers high-quality networking solutions with reliability you can trust.



Model 460MC  
G.703 Balun, 2 Mbps,  
With Built-in Cables  
(75-Ohm to 120-Ohm)



Model 460  
G.703 Balun, 2 Mbps  
(75-Ohm to 120-Ohm)



Model 465  
G.703 Balun, 2 Mbps  
(1.6/5.6 Connectors)

# Specifications

**Transmission Line:** CCITT G.703 (unstructured)

**Data Rate:** 2.048 Mbps

**75 Ohm Connection:** Dual BNC (460) or 1.6/5.6 coax connectors, male or female

**120 Ohm Connection:** Shielded RJ-45 jack (standard) or External Terminal Block

**Power Supply:** none required

**Link-to-Data Isolation:** 500 volts AC/DC

**Operating Temperature:** 0° to 50°C (32° to 122°F)

**Dimensions:** 2.7" (6.86 cm) L x 1.7" (4.32 cm) W x 0.8" (2.03 cm) D

# Ordering

| #  | Model #    | Description   | Availability         |
|----|------------|---|----------------------|
| 1  | 11758-01   | 6" COAX CABLE, RG-62 A/U,75 OHM Male BNC to Male BNC      | General Availability |
| 2  | 460F       | G.703 BALUN 75/120 OHM Female BNC                         | General Availability |
| 3  | 460F-1-15M | G.703 BALUN 75/120 OHM Female BNC, DB15 CABLE             | Special Order        |
| 4  | 460F-TBP   | G.703 BALUN 75/120 OHM W/TERM BLOCK                       | Special Order        |
| 5  | 460M       | G.703 BALUN 75/120 OHM Male BNC                           | Special Order        |
| 6  | 460MC      | G.703 BALUN 75/120 OHM WITH DUAL BNC 6" COAX CABLES       | General Availability |
| 7  | 460MC-8    | G.703 BALUN 75/120 OHM WITH DUAL BNC 8" COAX CABLES       | Special Order        |
| 8  | 460M-TBP   | G.703 BALUN 75/120 OHM W/TERM BLOCK                       | Special Order        |
| 9  | 460R/16    | G.703 BALUN PANEL   | Special Order        |
| 10 | 465F       | G.703 BALUN 75/120 OHM,DUAL FEMALE 1.6/5.6                | Special Order        |
| 11 | 465MC      | G.703 BALUN 75/120 OHM, WITH DUAL 1.6/5.6; 6" COAX CABLES | Special Order        |

| Item Number   | Item Description  | Price   |
|---|---|---|
| SVC-SmartCare-BH<br>(/support/support.asp)                | Premium Support for Business Hours  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-SmartCare-24/7<br>(/support/support.asp)              | Premium Support, 24 x 7 Coverage  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-SmartAssist-BH<br>(/support/support-professional.asp) | Business Hour Support Services  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-SmartAssist-AH<br>(/support/support-professional.asp) | After Hours Support Services  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-ENHWAR1<br>(/support/support-warranty.asp)            | 1 Year Enhanced Warranty  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-ENHWAR2<br>(/support/support-warranty.asp)            | 2 Year Enhanced Warranty  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-ENHWAR3<br>(/support/support-warranty.asp)            | 3 Year Enhanced Warranty  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-ENHWAR4<br>(/support/support-warranty.asp)            | 4 Year Enhanced Warranty  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-ENHWAR5<br>(/support/support-warranty.asp)            | 5 Year Enhanced Warranty  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-EXTWAR2<br>(/support/support-warranty.asp)            | 2 Year Extended Warranty  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-EXTWAR3<br>(/support/support-warranty.asp)            | 3 Year Extended Warranty  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-EXTWAR4<br>(/support/support-warranty.asp)            | 4 Year Extended Warranty  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-EXTWAR5<br>(/support/support-warranty.asp)            | 5 Year Extended Warranty  | Contact us (/howtobuy/) for availability and pricing. |
| SVC-NETENG-HOUR<br>(/support/support-professional.asp)    | Network technician hour rate for pre-config services, after hours support, etc. | Contact us (/howtobuy/) for availability and pricing. |

## Related Products

Model 1001MP16 (/products/product\_detail.asp?id=29)

16-Slot Universal Mounting Panel

## Backgrounders

FiberPlex Capabilities Guide (/backgrounders/FiberPlex\_Capabilities\_Statement.pdf)

October 6, 2017

## Certifications

Declaration of Conformity - Data Communications Devices (/certifications/00109D1-001P.pdf)

July 16, 2018

Declaration of Conformity - Data Communication Devices: Baluns, Data Taps, Surge Protectors, Pocket Testers, Isolators, Modem Eliminators, Adapters, Gender Changers (/certifications/00111D1-001E.pdf)

February 12, 2015

Declaration of Conformity - Baluns (/certifications/00111D1-001D.pdf)

December 26, 2012

## Data Sheets

Patton Product Life Cycle Color Codes (/datasheet/Life-Cycle-Availability-Codes.pdf)

April 24, 2015

## Product & Solution Guides

Enterprise Networking Products Guide (/guides/07MENTNET-PG-lo.pdf)

November 10, 2010

## User Manuals & Configuration Guides

BroadSoft Configuration Guide for SmartNode SmartWare

(/manuals/BroadSoft\_PartnerConfigGuide\_Patton\_SmartNode.pdf)

December 2, 2013

Model 460 Series Manual, Rev. G (/manuals/460.pdf)

September 15, 2004

Model 460 Series Manual, Rev. E (/manuals/460-e.pdf)

February 23, 2000

Model 460RC Manual (/manuals/460rc.pdf)

March 13, 1998

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- > VoIP Appliances ([/ip-pbx/#products](#))
- > SS7 Media Gateways ([/ss7-gateway/#products](#))

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- > Virtual Access Router ([/virtual-access-router/#products](#))
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- > Intelligent Edge Orchestration ([/intelligent-edge-orchestration/#products](#))
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- > xDSL Products ([/xdsl/#products](#))
- > Routers ([/router/#products](#))
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- > Ethernet Over Fiber ([/products/network-connectivity/#23](#))
- > Multiplexers & Sharing Devices ([/products/network-connectivity/#12](#))
- > Fiber Telecom (T1/E1/PRI, Analog and ISDN) ([/products/network-connectivity/#28](#))
- > Pro AV Live and Media Broadcast Fiber Systems ([/products/network-connectivity/#29](#))
- > SFP (Small Form Pluggable) Modules and Kits ([/products/network-connectivity/#30](#))
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- > Baluns ([/products/network-connectivity/#3](#))
- > Surge Protectors & Opto-Isolators ([/products/network-connectivity/#15](#))
- > DataTaps, Testers, Adapters, Rack Kits ([/products/network-connectivity/#7](#))
- > Interface Converters ([/products/network-connectivity/#10](#))
- > Fiber Rack and Enclosure Systems ([/products/network-connectivity/#25](#))
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