

### Profile on Baluns

Baluns allow two dissimilar cable types to be joined together with the minimum of electrical degradation. The word Balun comes from the terms Balanced cable (twisted pair), and Unbalanced cable (co-ax), i.e. a device permitting the physical and electrical connection of these very different cable types. Our Baluns have been designed with the installer in mind. The units have the following features:

- 100% Tested for reliability
- Bench marked to IBM interface specifications
- Compact, ergonomic design for ease of installation in confined areas
- Tough flame retardant housing withstands harshest working environments
- Individually labelled to simplify identification and pin-outs
- UK manufacture ensures fast delivery times for all quantities



#### Male 93 Ohm BNC 3270 Coax to 100 Ohm RJ45 Balun

Used to connect 3278 type terminals to their controller units via the Structured Cabling System. Available in both UTP and F/STP.

UTP pins 1/2 P/No. NBTAMNA-1200-093100

F/STP pins 1/2 P/No. NBTAMSB-1200-093100

UTP pins 4/5 P/No. NBTAMNA-4500-093100

F/STP pins 4/5 P/No. NBTAMSB-4500-093100



#### Female 93 Ohm BNC 3270 Coax to 100 Ohm RJ45 Balun

Used to connect 3278 type terminals to their controller units via the Structured Cabling System. Available in both UTP and F/STP.

UTP pins 1/2 P/No. NBTAFNA-1200-093100

F/STP pins 1/2 P/No. NBTAFSB-1200-093100

UTP pins 4/5 P/No. NBTAFNA-4500-093100

F/STP pins 4/5 P/No. NBTAFSB-4500-093100



#### 105 Ohm Twinax (AS400,S3X) to 100 Ohm RJ45 Balun

Used to connect AS400 type hosts and terminals to the Structured Cabling System. May be used with both passive and active Loop Wiring Concentrators. Available in both UTP and F/STP.

UTP pins 1/2 P/No. NBTATNA-1200-105100

F/STP pins 1/2 P/No. NBTATSB-1200-105100

UTP pins 4/5 P/No. NBTATNA-4500-105100

F/STP pins 4/5 P/No. NBTATSB-4500-105100



#### 75 Ohm Male Composite Video Adaptor

Used to connect surveillance equipment to a Structured Wiring System. They provide the physical interface between 100 Ohm RJ45 and 75 Ohm BNC. Available in both UTP and F/STP.

UTP pins 1/2 P/No. NBTAHNA-1200-075100

F/STP pins 1/2 P/No. NBTAHNB-1200-075100

UTP pins 4/5 P/No. NBTAHNA-4500-075100

F/STP pins 4/5 P/No. NBTAHNB-4500-075100

For more Video Baluns and Adaptors for CCTV and CATV applications visit the NEW "Video Balun" section



### 150 Ohm Token Ring Balun

Used to connect Multiple Station Access Units to the Structured Wiring System. Providing the physical interface between 100 Ohm RJ45 and 150 Ohm Data Connector. Available in both UTP and F/STP.

UTP pins 4/5 6/3 P/No. NBTABNB-4563-150100

F/STP pins 4/5 6/3 P/No. NBTABSB-4563-150100



### 150 Ohm 10BaseT Ethernet Balun

Used to connect 10BaseT Hubs to the IBM Cabling System providing the physical interface between 100 Ohm RJ45 connectors and the 150 Ohm data connectors. Available in both UTP and F/STP.

UTP pins 1/2 3/6 P/No. NBTABNB-1236-150100

F/STP pins 1/2 3/6 P/No. NBTABSB-1236-150100



### 150 Ohm 100 Base Tx Fast Ethernet Balun

Used to connect 100 Base Tx Hubs and Power Users etc. to the IBM cabling system, providing interface between CAT5 100 Ohm shielded or unshielded twisted pair RJ45 connectors and the 150 Ohm data connectors.

UTP pins 1/2 3/6 Part No. NBTAANB-1236-150100

F/STP pins 1/2 3/6 Part No. NBTAASB-1236-150100

Although the IBM cabling system is not designed to operate at these high speeds, our experience shows that the combination of its high specification and our own very high performance Baluns provides a reliable and trouble free combination.



### Compact Style Balun

Token Ring, 10BaseT and 100BaseTx fast Ethernet Baluns are all available in a "compact" configuration where the RJ45 connector is at 90 degrees to the data connector. This is especially useful where space is at a premium e.g. mounting in floor boxes or wall plates. The 90 degree entry construction also provides a neater solution in panel mounting applications where cables can be inserted vertically. Both "left handed" and "right handed" versions are available.



### Token Ring Twisted Pair 4/16 Mbps Media Filter

The Token Ring Media Filter is used to connect data terminal equipment such as personal computers to the Token Ring over the UTP or F/STP Structured Wiring System. It provides the physical means to attach the 9 way D of the equipment and the RJ45 of the Wiring

System. The item is compatible with IBM 8230 units. It is available in both UTP and F/STP.

UTP P/No. NBTAENB-3645-150100

F/STP P/No. NBTAESB-3645-150100

**155 Megabit/Sec ATM Balun**

Enabling Asynchronous Transfer Mode (ATM) equipment to be connected via the CAT5 Structured Cabling System this Balun provides an interface from Receive and Transmit BNC coax cables to 100 ohm shielded or unshielded twisted pair RJ45 connectors.

Part No. NBTBANB-1278-075100

---

**93 Ohm IBM® Data Style Red Balun**

Used to connect 3278 type terminals and related Controller units to the IBM Cabling System. One Balun allows one transmission path. This is a compact equivalent to the IBM single red Balun (6339082).

P/No. NBBACSB-1200-093150

---

**93 Ohm IBM® Double Data Style Red Balun**

Used to connect 3278 type terminals and related Controller units to the IBM Cabling System. One Balun allows two transmission paths. This is a compact equivalent to the IBM double red Balun (6339083).

P/No. NBBANSB-1234-093150

---

Ordering Code

NB \* \*\* \* A - \* \* \* \* - \*\*\* \*\*/ \* \*

Product Series

B = IBM Product Group  
T = Twisted Pair Product Group

AA = 100 Based Tx Balun = Data connector/Female RJ45  
AB = 10 Base T Balun - Data connector/Female RJ45  
**AC = Compact Balun**  
AD = Double Balun  
AE = Media Filter  
AF = BNC Female/Female RJ45 balun  
AG = Data Connector/Female RJ45 Adaptor  
AH = BNC Male/Female RJ45 Composite Video Adaptor  
AM = BNC Male/Female RJ45 Balun  
AN = Double data-style Balun  
AR = Red Cabled Balun  
AS = Single Balun  
AT = Tw inax Balun = Tw inax Male/Female RJ45  
AV = Compact right angled Balun BNC Female to Male data

S = Shielded

Standard Product

Signal Pin Number (1-8)\*

Return Pin Number (1-8)\*

Signal Pin Number (1-8)\*

Return Pin Number (1-8)\*

Unbalanced:  
050 = 50 Ohm  
075 = 75 Ohm  
093 = 93 Ohm  
105 = 105 Ohm  
150 = 150 Ohm

Balanced:  
100 = 100 Ohm  
120 = 120 Ohm  
150 = 150 Ohm

1 = 1 metre to  
9 - 9 metres etc.  
A = Standard

1 = 0.1 metre to  
9 = 0.9 metres etc.

**\* If any termination position is unused then please insert a zero (0)**