

Liberator Application Note for Drop & Insert Multiplexing.

The Liberator range includes models with one to three E1 and/or PRI ISDN interfaces and optional ISDN BRI interfaces.

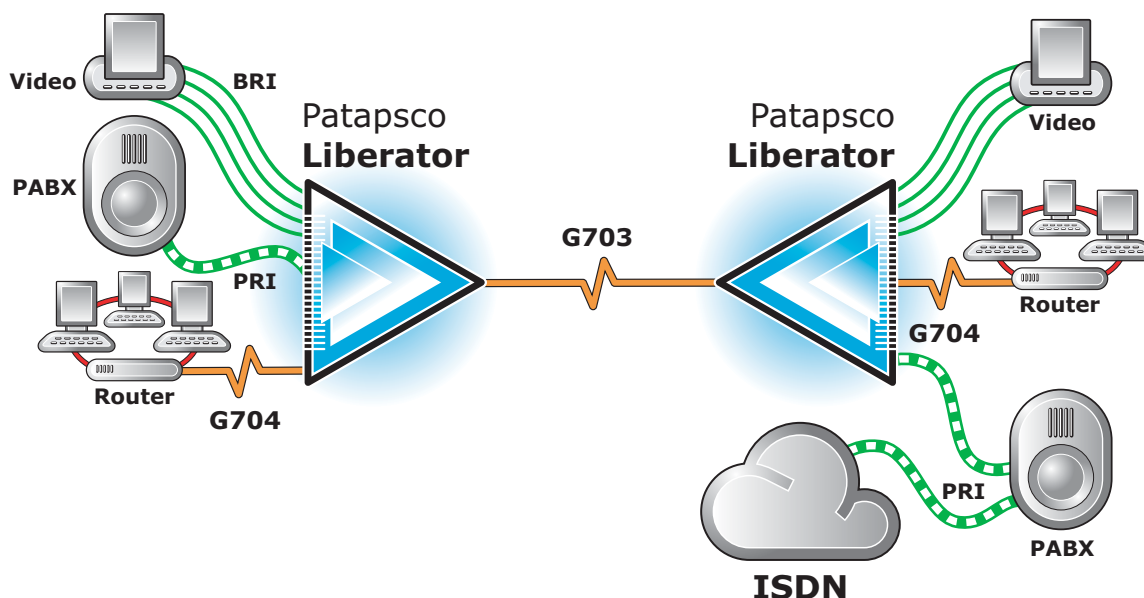
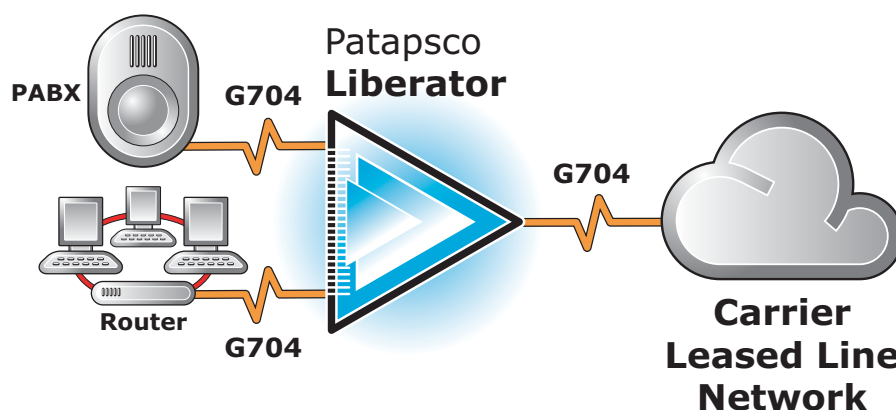
The products can address a number of application generally called "Drop and Insert", although the Liberator is far more flexible and programmable than "traditional" Drop and Insert multiplexers. In particular it can treat the inter-Liberator G.703 links as a private ISDN circuit, giving it the ability to switch calls dynamically, opening up a number of new applications and uses.

Some illustrations of possible configurations are shown below and pricing is shown on the Technical Data Sheets available from www.patapsco.co.uk.

G.704 DROP & INSERT (single site)

The diagram right shows the low-cost Liberator 3POB configured as a G.704 "Drop & Insert" multiplexer, splitting a trunk between two local devices.

This is a very economical way to provide two services from a single network access point.



DROP & INSERT (multiple sites 1)

The next example above shows two sites linked across a G.703 leased line which the Liberators then structure as a G.704 ISDN circuits. Calls can be switched across the link dynamically.

The routers can have allocated capacity across the link.

The PABXs make internal intra-company calls using the G.703 link and out-going network calls via the PABX's ISDN access.

Similarly the two videoconference units can communicate across the private link and externally using the ISDN.

DROP & INSERT (multiple sites 2)

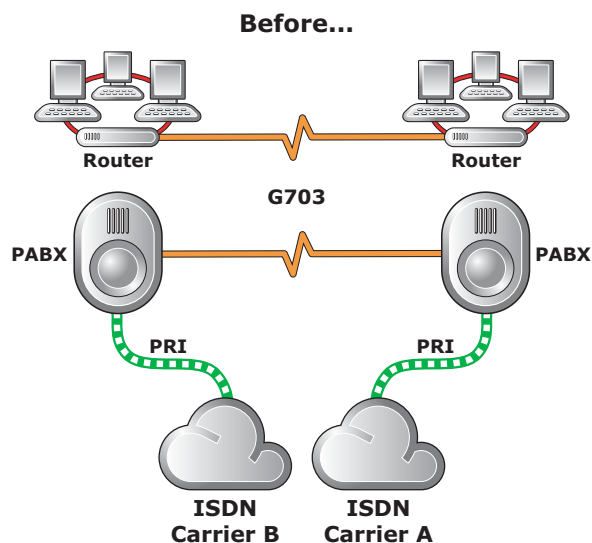
These "Before" and "After" diagrams illustrate a company with two locations and G.703 links between them – one for voice and one for data. In addition to the two G.703 lines each site has its own PRI ISDN service.

Using Liberator the company has been able to reduce the number of interfaces on each PABX, the number of PRI ISDN interfaces and the number of leased lines – a large on-going cost saving.

The Liberator's direct data circuits to the routers, intra-company telephone calls to the PABXs, and external calls to the PRI ISDN service.

The two PABXs can contend for the ISDN service, using it as efficiently and effectively as possible.

Capacity between the two sites can be automatically changed on a time-of-day basis so that the routers, for example, have higher capacity for out-of-hours file transfers/backups.



Liberator will connect any ISDN port or 64kbps timeslot to any port, and any channel to any channel.

Capacity can be "nailed up" or dynamic with devices being allocated minimum and maximum number of channels.

Schedules allow different profiles to be selected at different times so, for example, a router can be given more capacity in the evening for backup etc when the PABX is not so busy.

Liberator is configured and managed by Patapsco's DbManager (see separate Technical Data Sheets).

Through the intuitive GUI, different options can be set to tailor the use, connectivity, least cost routing and other features.

New versions of software can be remotely uploaded to Liberator via the DbManager.

The Liberator supports up to three PRI ports; PRI1 is a TE ISDN stack (user-side); PRI2 NT (network-side) and PRI3 is software switchable TE/NT. These ports can be configured as G.704 non-ISDN ports or with PRI signalling.

Interfaces PRI1 and PRI2 are relay protected against power failure and all are individually software selectable between CRC4 and non-CRC4 framing and configurable with/without t/s16 signalling for PRI on a per port basis.

Optionally 8 or 16 BRI "S" NT interfaces can be populated (they look like a normal carrier-delivered BRI).

Power is supplied via an internal supply with an optional external in-line unit for BRI Power Feed.

Liberator is very compact at 290mm wide x 199mm deep x 41mm high and weighs just 1.2kgs

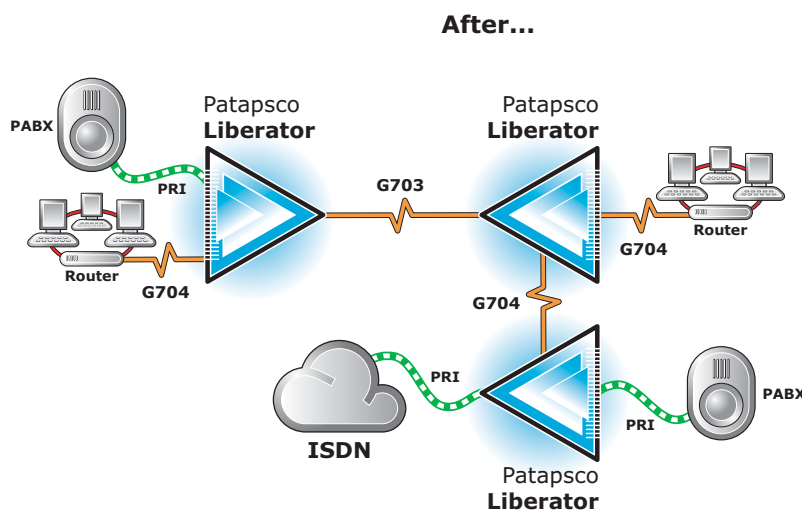


Image taken from the DbManager

Please see Technical Datasheets for further details and pricing.