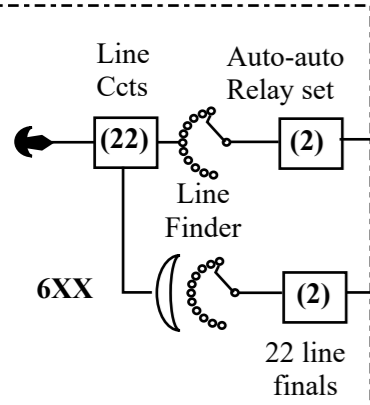


**Lydney Junction
Signal Box
6XX**



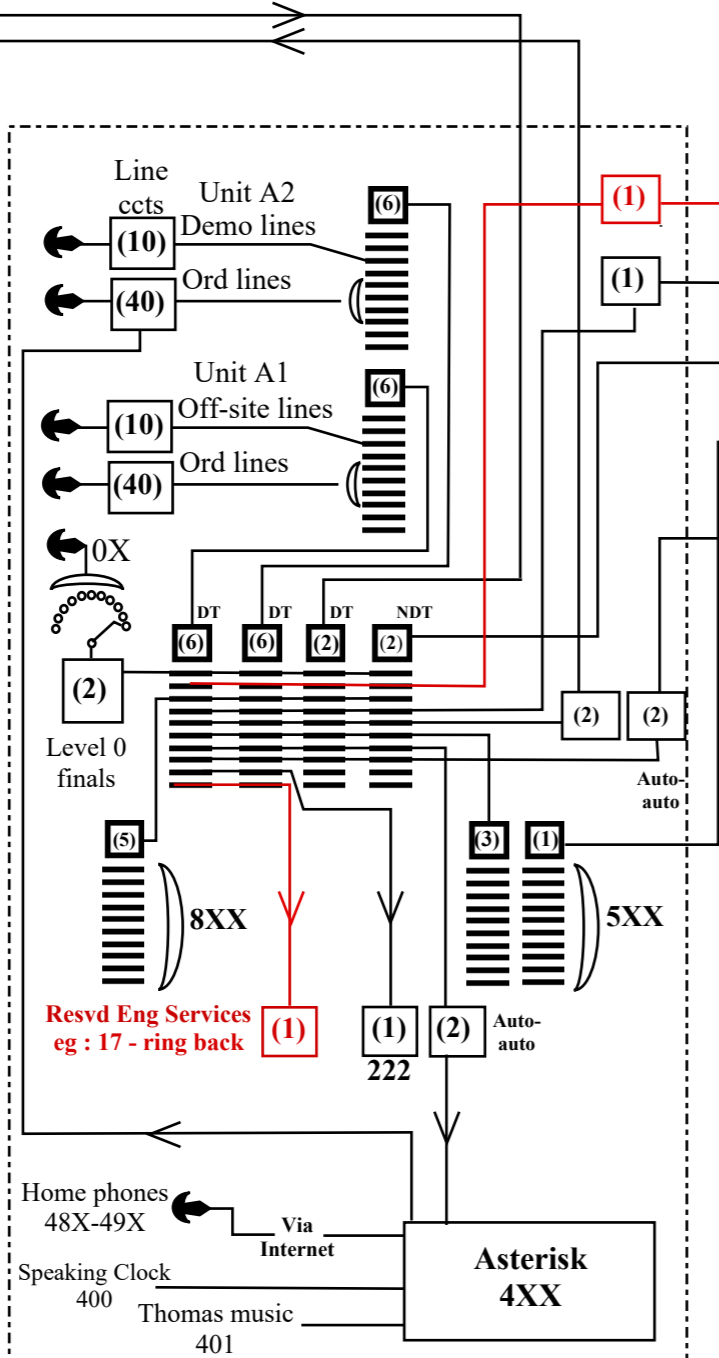
Lydney Junction Signal Box exchange is a simple "trombone" connected satellite exchange.

All outgoing calls are made via first selectors at Norchard from where the caller gets dial tone.

Dialling 6 anywhere on the network gets the call to an incoming uniselector final selector at Lydney Junction. The uniselector bank is used to permit calls to 10-19, 20-29, 90 (exchange telephone) and 99 (exchange test number).

Lydney Signal Box serves all telephones at the junction and as far north as the bypass crossing.

**Norchard
4XX, 5XX, 8XX, 0X**



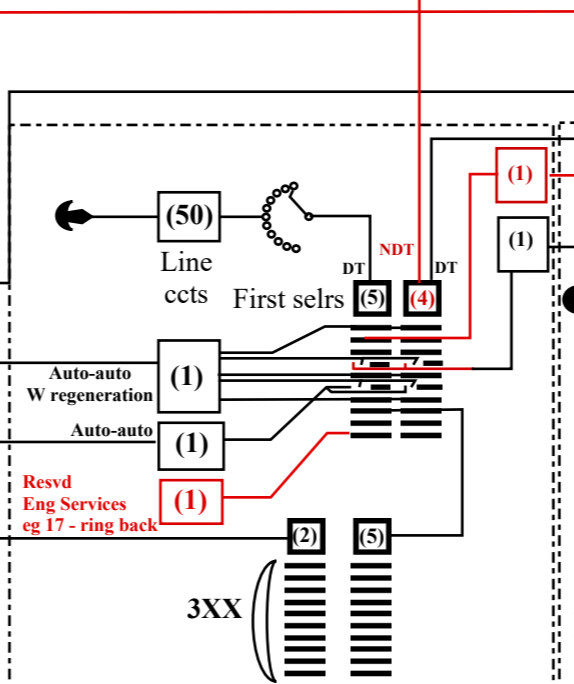
Norchard is a UAX13 acting as the main exchange on the DFR Internal Linked Numbering Network. There have been small changes in that some of the local first selectors have been converted to incoming selectors to make the exchange suitable as a tandem.

The coinbox discrimination feature has been used so that (1) museum demo phones can only dial level 8 museum phones and (2) off site phones cannot dial the 222 fire warning equipment.

Norchard serves all telephones between the bypass crossing and the abutment north of Norchard.

The Asterisk is a computer exchange permitting phones at home to be connected to the railway network via the internet.

**Parkend
3XX**

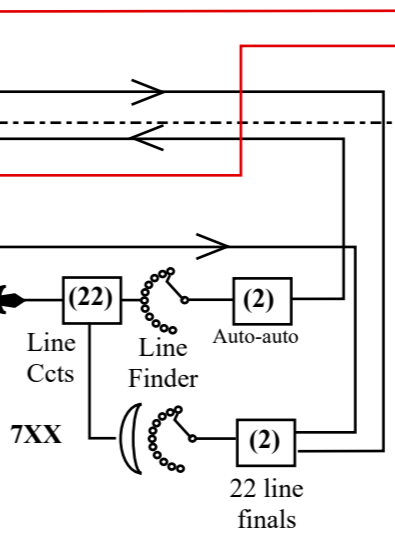


Parkend exchange is constructed from PABX4 equipment. It has a 50 line multiple. The line circuits are 600 type relays with only half of the L relay winding space available for line calling purposes. The L relays are not very sensitive. It is therefore unsuitable as an exchange with long lines connected to it.

This restricts its operational area to Parkend and Whitecroft stations and as far south as Tuft's Bridge.

Junction calls going via Norchard from levels 4, 6, 7, 0 and any level 5 overflow calls are regenerated in the outgoing auto auto relay set. This relay set recognises which level has been used to connect to it, generates a digit appropriate to that level, stores the last two digits in a regenerator and then transmits the three digit number to Norchard.

**Parkend North
7XX**



Parkend Signal Box exchange (known as Parkend North) is a simple "trombone" connected satellite exchange.

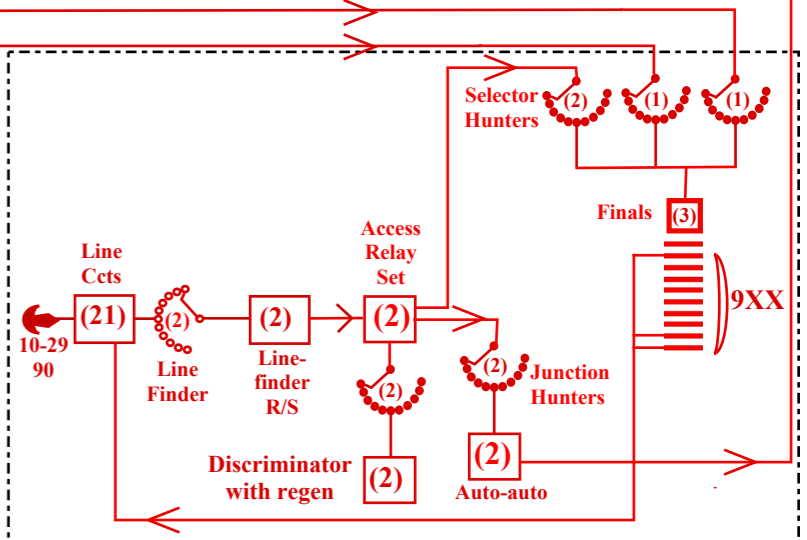
All outgoing calls are made via first selectors at Parkend from where the caller gets dial tone.

Dialling 7 anywhere on the network gets the call to an incoming uniselector final selector at Parkend North. The uniselector bank is used to permit calls to 10-19, 20-29, 90 (exchange telephone) and 99 (exchange test number)

The line circuits use 3000 type relays with full windings and are therefore very sensitive. This will permit the connection of very long lines.

Parkend North serves all telephones at Parkend Signal Box and the area up to and perhaps beyond Speech House Road.

**Cinderford
9XX**



Cinderford exchange is merely a proposal at present. It would be required if the railway were to extend beyond Speech House Road to Cinderford.

As this exchange will be several miles distant from Parkend and Norchard it is proposed that all junction calls from Cinderford will be regenerated. A call to Lydney Junction would also be further regenerated at Parkend.

When called, the access relay set is seized via a linefinder. In turn its discriminator hunter looks for and seizes a discriminator. Dial tone is returned from the discriminator. Any digit dialled is stored in a regenerator and the first digit also steps a uniselector. Strappings on the uniselector bank determine whether the call is local or junction.

On a junction call, the discriminator instructs the access relay set to use its junction hunter to find a free junction to Parkend. The regenerator then transmits the three stored digits to Parkend exchange. When all digits have been sent, the discriminator is released.

On a local call, the discriminator is released and the access relay set is instructed to use its selector hunter to find a free final selector. The last two digits will be dialled into the final.

The multiple will cover 10-19, 20-29, 90 (exchange telephone), 99 (exchange test number).

Dialling 9 anywhere on the network gets the call to an incoming selector hunter at Cinderford which in turn connects the incoming junction to a free final selector. Incoming junctions from Norchard and Parkend will be required.

**Internal Strowger Trunking
Proposed Work in Red
DFR tk001e**

ISSUE E	04/12/2016	Redrawn, Serridge changed for Cinderford Exchange
ISSUE D	27/11/2015	Redrawn, Serridge exchange added
ISSUE C	30/10/2015	Whitecroft deleted, Parkend Signal Box added
Issue B	08/03/2015	Lydney Junction exchange deleted, Whitecroft added
ISSUE A	19/3/2012	Opening Issue

Dean Forest Railway