

Westpac Relay Operation

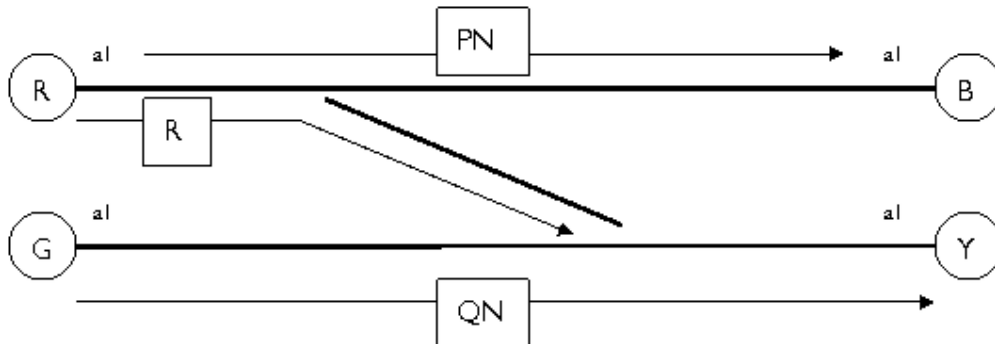
- Signal Selection

Signaller actions	Relays	Interlocking/Panel Actions
PUSHES ENTRANCE BUTTON	(F)SR UP	
	(F)CR DOWN	
	(F) PR UP	
	SR UP	ENTRANCE LIGHT FLASHING
	(M) OR (S)ER UP & SR STICKS	
EXIT BUTTON PRESSED	(F) SR UP	
	(F) PR UP	
	(F)CR DOWN	
	DR UP (& STICKS)	
	(F)SR STICKS	
	DCR DOWN	
	DCPR DOWN (<i>slow to drop</i>)	
	(M) OR (S) DAR UP	
	DACR DOWN	
	UFR UP	
	ZCR DOWN	
	UFCR DOWN	
	UFZPR UP	(END OF SELECTION)
WITH: SR UP, UEPR UP, UZR DOWN: CUR UNBRIDGED		
WITH: DAR UP, (F)SR UP, ATPR UP, UFR UP, UFZPR UP, XNSR DOWN, UNR UP: FEED ON CUR COILS		
	CUR UP	ALSO DROPS CURCR IN ADJACENT SIGNAL SETS
	CLCR DOWN	
	CUPR UP	DROPS UZR IN NEXT TRACK TYPE UNIT
WITH: SR UP, UEPR UP, UNR UP, (LUR REL FEED SENT OUT FROM ENTRANCE SET)		
	LUR DOWN	
	LUPR DOWN	
	CLCSR DOWN	ROUTE LIGHTS ON PANEL
CUR REBRIDGED BY CUPR UP & LUR DOWN, FEED PASSED ON TO NEXT UNIT		
	FKR UP	
	UFKPR UP	END OF CALLING AND LOCKING
	DJR DOWN	PBI NORMALISES
	SR DOWN	
	NR DOWN	
	UEPR UP	ENTRANCE LIGHT GOES STEADY
	DCPR UP	PROVES PBI NORMALISATION
	DJR UP	READY FOR NEXT ROUTE

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- **Calling & Locking**

Example diagram for calling and locking circuit:



Notes: Always +ve from left, -ve from right

In point type units, calling and locking relays are prefixed PN, QN or R, (i.e: PNUZR, or QNUZR etc).

The R (red), G (green), Y (yellow), B (blue) letters represent plug coupler colours.

Signaller actions	Relays	Interlocking/Panel Actions
If setting along top line (PN) for example:		
	PNUZR DOWN	
	RUZR DOWN	RUZR DROPS, BUT FEED IS PRESENT ON ONE a1 LINE ONLY
	PNCUR UP	ALSO DROPS CURCR IN ADJACENT SIGNAL SET
	PNCLCR DOWN	
	PNCUPR UP	DROPS UZR IN NEXT TRACK TYPE UNIT
	PNLUR DOWN	
	PNLUPR DOWN	
	PNCLCSR DOWN	ROUTE LIGHTS ON PANEL
CUR REBRIDGED BY PNCUPR UP & PNLUR DOWN, FEED PASSED ONTO NEXT UNIT		
	PNCULPR UP	INITIATES POINT MOVEMENT
POINT LOCK RELAY CIRCUIT		
	CR UP	
	WZR UP	POINTS FREE TO MOVE
	NLR UP	
	NLPR UP	
	NLKR UP	
	NKZLPR UP	LOCKED, DETECTED, IN CORRESPONDENCE
	PNCLCSR DOWN	
	WZR DOWN	
	WZPR DOWN	

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- Aspect (UCR)

Positive Line	Comments	Negative Line
Destination set		
UFR UP	UFZPR UP	
FTPR UP	CLASS DEPENDANT	UNR UP
ECPR UP		
Track sets		
TPR's UP		LUR DOWN
		CUR or CUPR UP
Points sets		
TPR UP		KLZPR UP
CUPR UP		CULPR UP
Entrance set		
TPR UP	CLASS DEPENDANT	CURCR DOWN
GSR UP		UEPR UP
UER UP		YR (P) UP
UCR UP		
END OF ASPECT LEVEL		

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- **Route Releasing**

Signaller actions	Relays	Panel actions
BUTTON PULLED, NO TRAIN	NR UP (& STICKS)	
	AJR UP	BUTTON LIGHT EXTINGUISHES AFTER PRESET TIME
	ALSR UP (& STICKS)	
RELEASE FEED SENT OUT		
	LUR UP	
	LUPR UP	
	CUR DOWN	CURCR UP IN SIGNAL SET, THEN UER DOWN, UEPR DOWN, UEGR UP, ZCR UP. CUR REL FEED PASSED ONTO NEXT UNIT
	CUPR DOWN	
	CLCR UP	
	CLCSR UP	LUR RELEASE FEED PASSED ONTO NEXT UNIT. ROUTE LIGHTS EXTINGUISH
	UFR DOWN	
	UFZPR DOWN	
	UFCR UP	
	ZCR UP	
BUTTON PULLED (TRAIN ENTERING ROUTE)	A+FTPR's DOWN	
	TASR UP	
	ALSR UP (& STICKS)	
	NR UP (& STICKS)	BUTTON LIGHT EXTINGUISHES
RELEASE FEED SENT OUT		
	CUR DOWN	RELEASE FEED PASSED ONTO NEXT UNIT, THEN IN SIGNAL SET; CURCR UP, UER DOWN, UEPR DOWN, UEGR UP, ZCR UP
	CUPR DOWN	
	A+FTPR's UP	
	LUR UP	
	LUPR UP	
	CLCR UP	
	CLCSR UP	RELEASE FEED PASSED ONTO NEXT UNIT. ROUTE LIGHTS EXTINGUISH
	UFR DOWN	
	UFZPR DOWN	
	UFCR UP	
ZCR UP		

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- **Route Releasing Continued**

Signaller actions	Relays	Panel actions
BUTTON PULLED (TRAIN HAS GONE THROUGH)	TASR UP	
	ALSR UP (& STICKS)	ROUTE LIGHTS EXTINGUISH
	NR UP (& STICKS)	
	LUR UP	
	LUPR UP	
	CUR DOWN	RELEASE FEED PASSED ONTO NEXT UNIT. THEN IN SIGNAL SET: CURCR UP, UER DOWN, UEPR DOWN, UECR UP, ZCR UP
	CUPR DOWN	
	CLCR UP	
	CLCSR UP	RELEASE FEED PASSED ONTO NEXT UNIT. ROUTE LIGHTS EXTINGUISH
	UFR DOWN	
	UFZPR DOWN	
	UFCR UP	
	ZCR UP	

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