# 6. Configuration

# 6.1 General Information

The function of the PT 5211 VariTime™ Changeover is internally programmed by use of jumper plugs.

The jumpers are located on the left side of the Main Board (Unit 1). The jumpers are visible just below the printed circuit board, which is placed with the component side down.

#### ALARM:

Is defined as an action where the changeover indicates that there is or was, an error, either by closing the relay contacts in the remote connector and, if selected, sounding the audible beeper.

A previously detected fault is always indicated on the PT 5210 which performed the actual fault detection: the "WARNING" LED on the PT 5210 front plate lights up (*Please refer to the PT 5210 opera*ting manual).

# 6.2 Jumpers

# 6.2.1 PP1 - Audio Beeper

The audible alarm can be programmed to three different functional modes.

CENTER position: (factory default setting).

**OFF** 

No connection in the jumper field

## FRONT position:

### **FOLLOWS ALARM**

The beeper follows the alarm function and is reset together with this function from the front of the instrument.

### **BACK** position:

### **FOLLOWS FAULT**

The beeper follows the fault indicators on the front of the PT 5211. The fault indicators are directly controlled by the error signals from the PT 5210s. Whenever an error is detected in any of the PT 5210s, the beeper will sound.

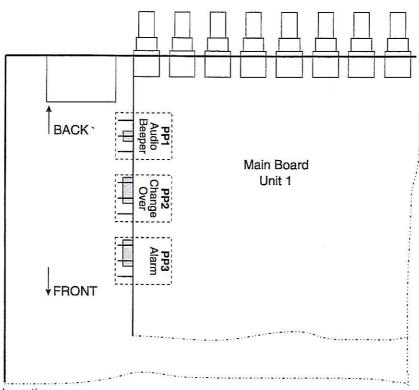


Fig. 6-1 Jumpers Location

# 7. Operating Instructions

# 7.1 Front Panel Indicators

#### **POWER**

A green LED that indicates when DC power is availabled from the internal DC supply.

#### REMOTE

A yellow LED that indicates that the unit is being controlled from the remote interface, not from the front panel.

#### ON AIR

Two green LEDs that indicates which sync generator is "on air". One of the ON AIR indicators will be active at any one time.

#### **FAULT**

Two red LEDs, each indicating that an error has been detected in the corresponding sync generator. When an LED is illuminated, it indicates that the error in the sync generator is momentarily active.

### 7.2 Front Panel Controls

### **HOLD TO MODIFY**

A safety button which has to be held down whenever another button is operated. This function reduces the risk of accidentally changing to the function of the changeover.

#### MANUAL

A button that takes the unit into the manual operation mode. The unit does not respond to any detected errors in the connected PT 5210s (except for the fault indicators which are still enabled). If the yellow LED in the button is lit, this indicates that manual mode is activated.

#### **AUTO**

A button that takes the unit into automatic operation mode. The unit switches automatically according to the status of error detection circuit in the sync generators and additional setup parameters in the changeover unit. A lit yellow LED in the button indicates that auto mode is activated.

### SYNC GEN. 1 / PRIMARY

A button used to select Sync Generator 1, PT 5210, as the primary - i.e. Sync Generator 2, PT 5210, as backup. If the green LED is lit, this indicates that Sync Generator 1 is selected as primary.

# SYNC GEN. 2 / PRIMARY

A button used to select Sync Generator 2, PT 5210, as the primary - i.e. Sync Generator 1 as backup. If the green LED is lit, this indicates that Sync Generator 2 is selected as primary.

#### REMOTE ENABLE

A button that enables use of the remote interface. Depending upon the selection on the remote connector the instrument may go into remote-controlled mode. In emergencies it is always possible to disable the remote and take the instrument into the local mode controlled from the front panel.

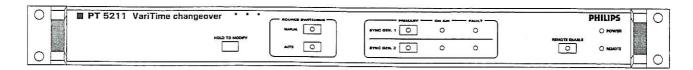


Fig. 7-1 Front of the Instrument

## 7.3.2 Remote Interface

The remote interface is of the TTL pull-down type with a 9-pin male sub-D connector on the back panel.

The remote interface provides access to additional functions other than those on the front of the instrument.

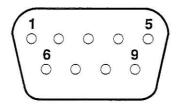


Fig. 7-4 Remote Interface, seen from rear panel

Dim.	Funtion and Value	0
Pin:	Funtion and Value:	Comments:
1	Input:	Control function to enable remote controlled
		operation if remote control is enabled on the front
	0: Remote enable	of the instrument. The output signals from the
	1: Remote disable.	remote connector are active and indicate the status
		even when the remote control is disabled.
	9	Note: If the remote is enabled on the front of the
		instrument and nothing is connected to the remote
		connector, the operation of the instrument is
		unchanged.
2	Input:	Selects which sync source has been selected as
		the primary.
	0: Selection of sync generator 1 as primary	
	1: Selection of sync generator 2 as primary	The primary generator is always selected "ON AIR"
		in manual mode.
	9	*
		The primary generator is the preferred "ON AIR"
	a a constant of the constant o	generator in auto mode.
3	Input:	Selects if the switching is manual or automatic.
	0: Selection of manual mode	
	1: Selection of auto mode	
4	Output: "ON AIR"	Indicates which sync generator is being used, i.e.
		ON AIR on the front panel.
	0: Sync generator 1	
	1: Sync generator 2	
5	Ground connection	
6	Output	Error status flag for sync generator 1.
	0: Fault on sync generator 1	Note: During power failure in the changeover,
	1: No fault on sync generator 1	pins 6 and 7 indicate fault on sync generators both
	045 Aug	1 and 2.
7	Output	Error status flag for sync generator 2
	0: Fault on sync generator 2	Note: During power failure in the changeover,
	1: No fault on sync generator 2	pins 6 and 7 indicate fault on sync generators both
		1 and 2.
8/9	Relay contacts	Relay contacts to be used for an externally
		powered alarm circuit. The relay contacts are
	Connected during fault conditions.	floating. The contact closes whenever an error is
		detected, also in case of internal or external power
		failure.