

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 operating 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.

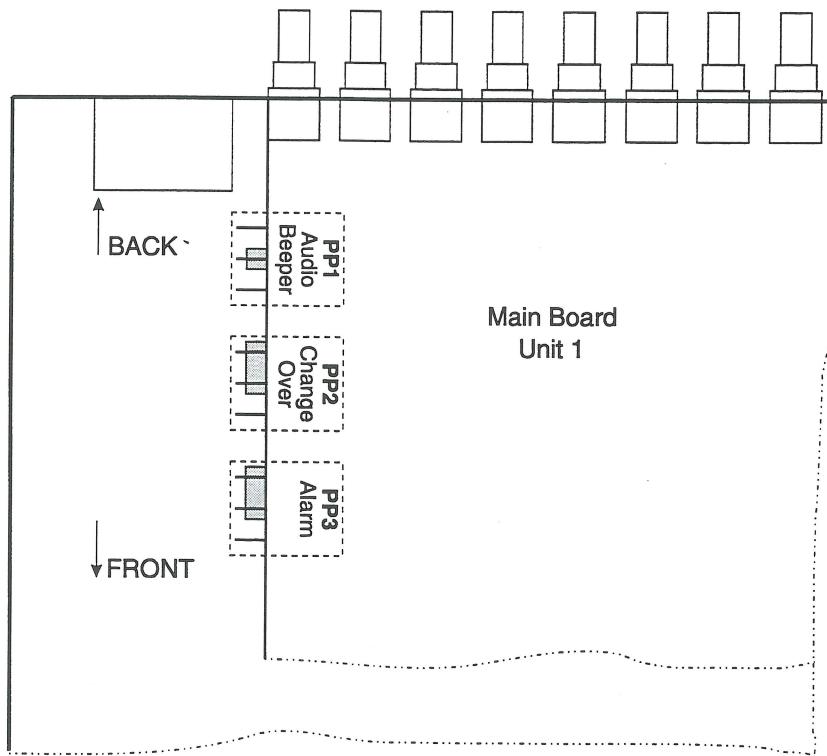


Fig. 6-1 Jumpers Location

6.2.2 PP2 - Change Over

PP2 enables the "one time switching only function" in AUTO mode.

When multiple switching is selected and a short circuit appears downstream from the changeover, the error can not be corrected and the changeover will start switching back and forth between the two sync generators. This can be overcome by use of the "one-time switching only" function.

When an error is detected in the primary sync generator, the changeover switches to the backup unit. The changeover will then switch back to the primary if the error flag from the primary disappears as long as "multiple switching" is selected. The changeover will not switch back when this happens if "one-time switching only" is selected.

FRONT position: (*factory default setting*)

Selects single time switching.

BACK position:

Selects multi time switching only.

6.2.3 PP3 - Alarm

The alarm relay with contacts connected to the remote connector can be programmed to operate in two different ways. The alarm relay can only be activated when the changeover is used in the AUTO mode or when the alarm relay is enabled in both MANUAL and AUTO mode. The alarm indicates that a fault has occurred. The function is latched and has to be reset at the front of the instrument.

Resetting the alarm relay

The alarm relay is reset by selecting MANUAL, or by designating one of the generators as primary.

To reset press:

HOLD TO MODIFY plus **MANUAL**

or

HOLD TO MODIFY plus **SYNC GEN. 1**

or

HOLD TO MODIFY plus **SYNC GEN. 2**

By choosing the mode already active the alarm relay can be reset without changing to changeover signal routing.

Note: The alarm can not be reset if the error signal from the PT 5210 is still active. It is not possible to disable the alarm relay function completely.

FRONT position: (*factory default setting*)

Alarm relay enabled in both auto and manual mode.

BACK position:

Alarm relay enabled in auto mode only.

7. Operating Instructions

7.1 Front Panel Indicators

POWER

A green LED that indicates when DC power is available 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.

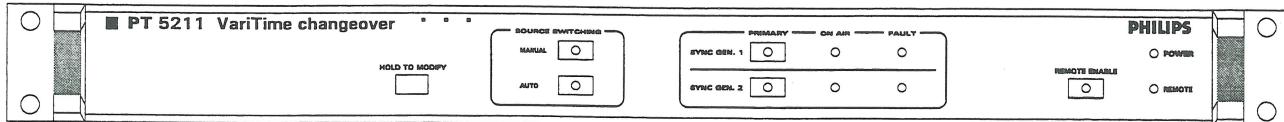


Fig. 7-1 Front of the Instrument

7.3 Rear Panel Connections

Note: Depending upon which options are installed, some or all of the outputs may be present in your changeover unit.



Safety Grounding (chassis)

On/Off button

Power switch

ON: When "1" is pressed.

OFF: When "0" is pressed.

Power Connector

Inlet power connector.

REMOTE

Connector for remote control of the changeover unit. The remote connector is of the ground closure type.

PT 5210 1/2

Control connector used with a special cable to connect the two PT 5210 VariTime™ Digital Sync Generators in the setup to the changeover unit.

Which generator is SPG1 and which is SPG2 is defined by how this cable is connected. The identification is printed on the cable connectors.

BNC connectors

BNC connectors are used on all the unbalanced channels. The connectors are arranged in groups of three, each identified by a number corresponding to a the changeover channel. The standard unit includes the Channels 1 to 4. Up to 12 channels can be installed in the form of optional units.

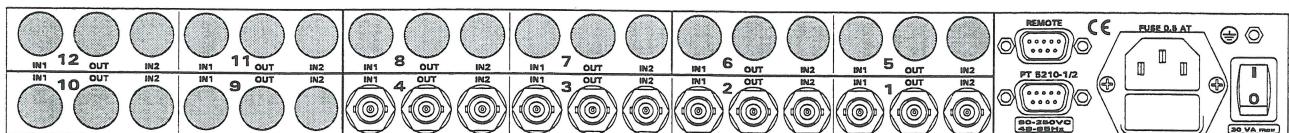


Fig. 7-2 Rear of the Instrument (Basic Instrument)

IN1:

Connector to be used for the signal from the SPG1 generator.

IN2:

Connector to be used for the signal from the SPG2 generator.

OUT:

Connector with the selected output from either SPG1 or SPG2.

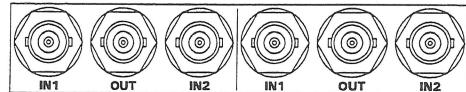


Fig. 7-3 PT 8617 Option

7.3.1 PT 8618 - Option

XLR connectors

XLR connectors are used for output at the balanced signal channels of the changeover. These channels are only available when the PT 8618 option has been installed.

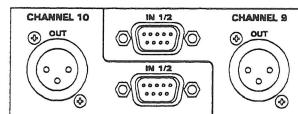


Fig. 7-4 PT 8618 Option

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.

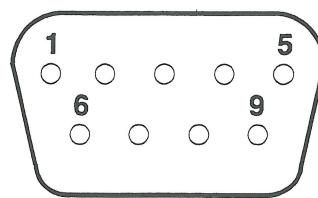
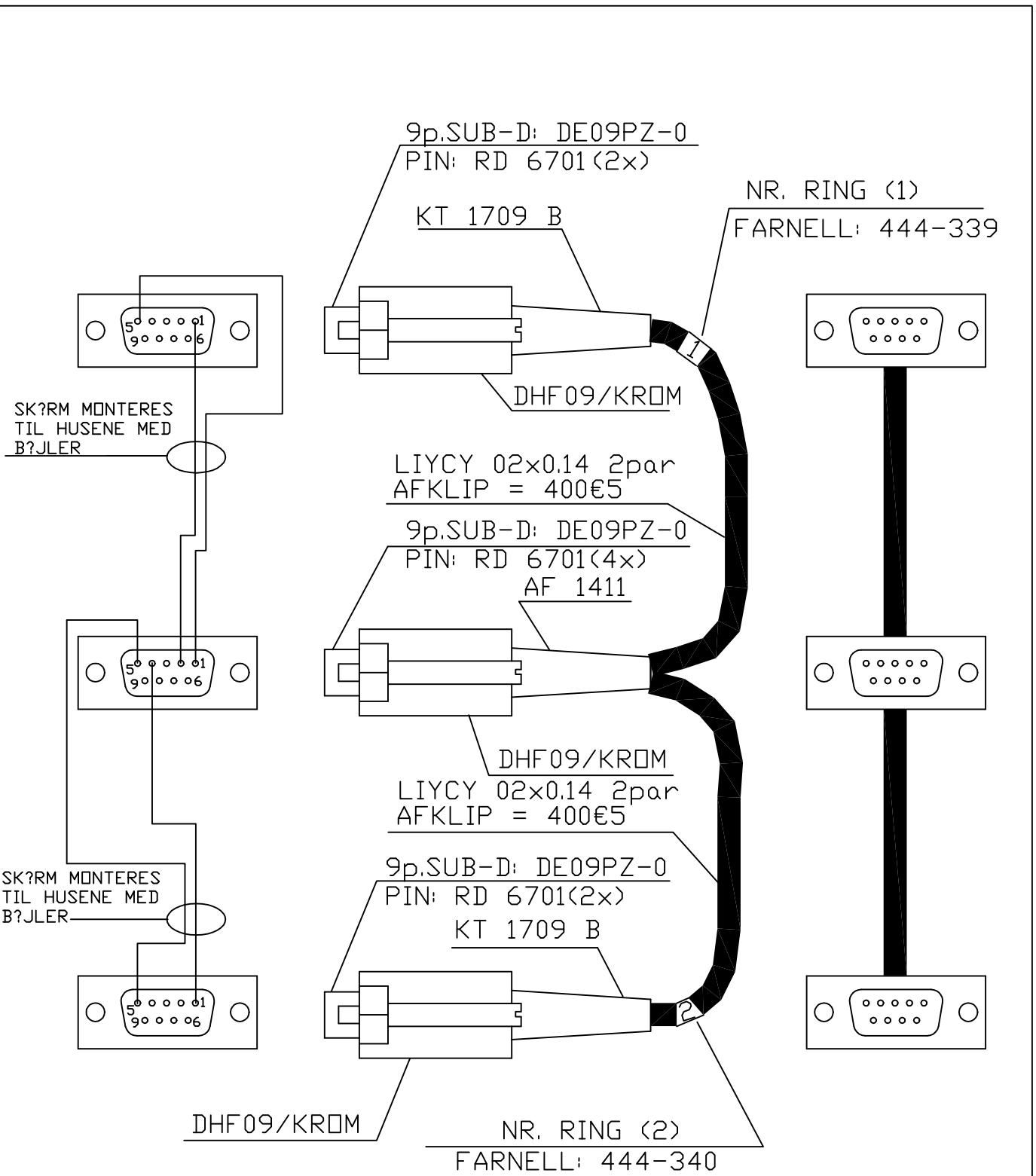


Fig. 7-4 Remote Interface, seen from rear panel

Pin:	Function and Value:	Comments:
1	Input: 0: Remote enable 1: Remote disable.	Control function to enable remote controlled operation if remote control is enabled on the front of the instrument. The output signals from the remote connector are active and indicate the status even when the remote control is disabled. <u>Note:</u> 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: 0: Selection of sync generator 1 as primary 1: Selection of sync generator 2 as primary	Selects which sync source has been selected as the primary. The primary generator is always selected "ON AIR" in manual mode. The primary generator is the preferred "ON AIR" generator in auto mode.
3	Input: 0: Selection of manual mode 1: Selection of auto mode	Selects if the switching is manual or automatic.
4	Output: "ON AIR" 0: Sync generator 1 1: Sync generator 2	Indicates which sync generator is being used, i.e. ON AIR on the front panel.
5	Ground connection	
6	Output 0: Fault on sync generator 1 1: No fault on sync generator 1	Error status flag for sync generator 1. <u>Note:</u> During power failure in the changeover, pins 6 and 7 indicate fault on sync generators both 1 and 2.
7	Output 0: Fault on sync generator 2 1: No fault on sync generator 2	Error status flag for sync generator 2 <u>Note:</u> During power failure in the changeover, pins 6 and 7 indicate fault on sync generators both 1 and 2.
8/9	Relay contacts Connected during fault conditions.	Relay contacts to be used for an externally powered alarm circuit. The relay contacts are floating. The contact closes whenever an error is detected, also in case of internal or external power failure.



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