

## BVACO4

# Operating Instructions

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C O M M U N I C A T I O N S

## **BVACO4, processor controlled Changeover Unit**

### **Introduction**

The BVACO4 is a processor controlled automatic change over for 4 active and one spare 100 V amplifier. If one of the active amplifiers fails the spare switches into its place. If the loudspeaker Line fails, the spare amp switches back in its waiting position. For maximum security the device has two 24V supply inputs.

### **Connectors**

#### **Line 1 - 4 In/Out - 100V In and Outputs**

The connectors **Line 1 In** to **Line 4 in** should be connected to the amplifier output. Take care that the amplifiers are connected in the right row.

The connectors **Line 1 Out** to **Line 4 Out** are going to the loudspeaker lines 1 to 4. At the end of this LS line a BEL1 module should be mounted to detect the surveillance tone. If necessary it could be 4 spurs (4 BEL1's) at each output.

For more information refer to the BEL1 manual.

#### **Spare In - 100V Input for the spare amplifier**

The connector **Spare In** has to be connected to the 100 V output of the spare amplifier. An internal BEL1 provides the surveillance of the spare while it's in the waiting position.

#### **IMP18 In/Out - Surveillance Synchronisation**

**IMP18 In:** Input for an external synchronisation of the surveillance tone. This connector has only to be used if the Surveillance-Freeze Function is active. Therefore refer to the IMP18 manual

**IMP18 Out:** This connector provides the reset-function of the changeover unit. It must be connected to the sync input of the tone generator (e. g. IMP18, Compact)

#### **Fault I/P 1 - 4 - Status Output**

Connector for the fault outputs. Take care that the outputs are connected to their relevant surveillance-module. If there is no fault they are Switched to 0V.

Important: Unused contacts must be set to 0V

#### **Fault I/P 5 - Status output**

Common fault output

#### **GND - Ground**

The device should be connected to Ground at this point

## **Connectors**

### **+24V / 0V - Supply Voltage**

In accordance with the shown polarity here should be connected to two independent power supplies. If one of the power supplies fails the other takes over and keeps the device running.

### **Signal In - NF-Inputs**

The balanced NF-signals should be connected in parallel with the amplifier input. Take care that the right signal is connected to the right input. This signal needs the surveillance tone with the correct level as well.

### **Spare IMP18 - NF-Input**

The spare amplifier must receive at least the surveillance tone. If this signal is not available separately you can use one of the AF-inputs 1 - 4. This Input is balanced as well.

### **Spare Out - AF-Output**

This balanced output feeds the spare amplifiers input.

### **Fault**

This is a common fault output using a volt free relay. In normal operation (without a fault) the COM is connected to N/C. if a fault occurs the COM changes to N/O

### **Reset**

If you close this contact to 0V an internal reset is initiated. This is the same as pressing the RESET-Button on the front panel.

## **Common**

### **50V Tap of the Transformers**

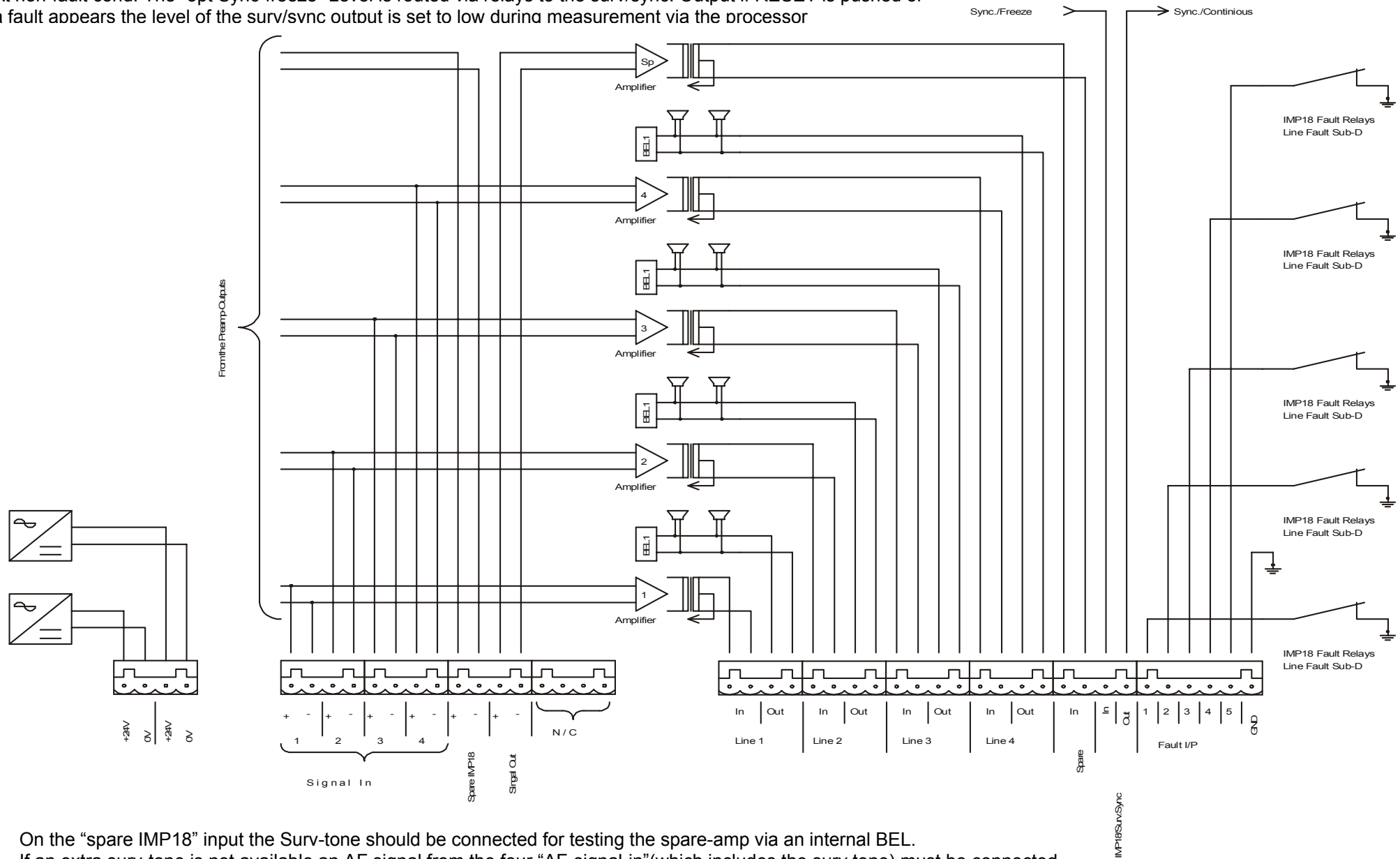
The output transformers of the amplifiers have a 50 V tap. This tap has to be connected to the surveillance inputs e. g. on a BVCOM Line Fault Input 1 - 4 and the spare amps tap to Fault Input 9. The fault inputs 5 - 8 must be connected to Pin 10.

## **Technical Data**

Supply voltage	:	2 x 24 VDC
Supply current:		max. 120 mA
Fault output:		dry contact, N/O-W-N/C 30 VDC / 125 VAC / 500 mA max.
Dimensions (B x H x T):		482 x 44 x 155 mm (19", 1 U) Without connectors on the rear
Weight	:	2,5 kg
Version:		for Rack-mounting 19" in 1 HE



At non-fault cond. The “opt Sync-freeze” Level is routed via relays to the surv/sync. Output if RESET is pushed or a fault appears the level of the surv/sync output is set to low during measurement via the processor



On the “spare IMP18” input the Surv-tone should be connected for testing the spare-amp via an internal BEL.  
 If an extra surv-tone is not available an AF signal from the four “AF-signal-in”(which includes the surv tone) must be connected.  
 Setting the RESET conn to low level is the same as pushing the RESET button on the front.