

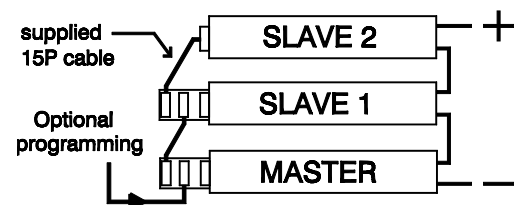
MASTER / SLAVE - SERIES ADAPTER CE

Features

- Connecting SM-3000 and ES-Series in master/slave series mode
- The master power supply can be upper or the lower power supply in the series
- Easy way of connection power supplies in the master /slave series mode
- Equal voltage sharing in the series operation
- Series operation possible up to 600 V

General

- A 15 pole 1:1 cable (0.6m) is supplied with the ADAPTER.
- The number of M / S SERIES ADAPTERS needed is one less than the number of power supplies in the series system (see example).
- For remote programming and monitoring please refer to the power supplies' manual.



Example with 3 power supplies

Specifications

- | | |
|----------------------------------|--|
| • Programming and monitor offset | : +/- 60 μ V typical |
| • Full scale error | : 0.1 % calibrated |
| • Non-linearity | : 0.01% typical, 0.05 % max. TC = 65 ppm/ $^{\circ}$ C |
| • Common mode rejection | : 80 dB @ 50 Hz |
| • Temperature coefficient | : -65 ppm typical |
| • Voltage range | : 0 - 5 V |
| • Offset | : \pm 60 μ V typical, \pm 180 mV max. |

The full scale voltage of the M / S SERIES ADAPTER is factory-calibrated within 0.1 %.

Offset, full scale error, non-linearity and temperature coefficient have to be added to the specifications of the power supply.

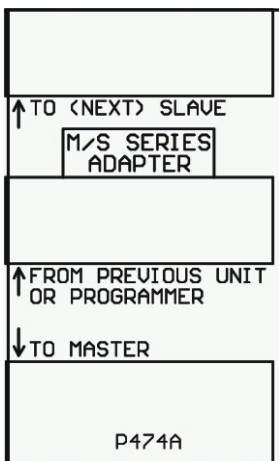
Installation

- Switch off the power supplies and connect the outputs in series.
- Determine which unit (upper or lower) you want to use as master and plug the M / S SERIES ADAPTER in the 15 pole programming connector on the master power supply.
- Connect the standard 15 pole (1:1) cable between the connector 'TO (NEXT) SLAVE' on the adapter and the 15 pole programming connector on the slave power supply.
- Put the CV programming switch on the slave power supply in position *REMOTE*.
- Turn the CV control of the master power supply fully counter clockwise and switch all units on. When you turn the CV control clockwise all power supplies should have the same output voltage.

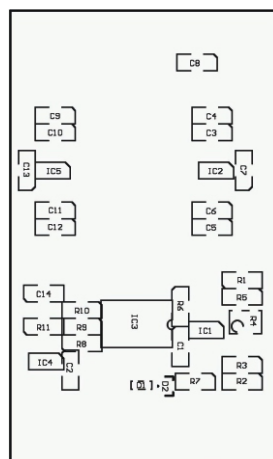
Note: The total output voltage is the sum of the voltages indicated on the power supply's voltmeters.

- The series system can either be controlled manually with the front panel CV control or programmed by an external voltage.

To program the series system put the CV programming switch on the master in position *REMOTE*. Connect your programming source to the connector labeled 'FROM PREVIOUS UNIT OR PROGRAMMER' on the ADAPTER that is plugged into the master power supply.



Top view



Component layout

Partlist

C1	=	47PF 50V	PHILIPS
C2	=	150PF 50V	PHILIPS
C3	=	C3216 1UF16V	TDK
C4	=	C3216 1UF16V	TDK
C5	=	C3216 1UF16V	TDK
C6	=	C3216 1UF16V	TDK
C7	=	X7R 0.47UF25V	PHILIPS
C8	=	C3216 1UF16V	TDK
C9	=	C3216 1UF16V	TDK
C10	=	C3216 1UF16V	TDK
C11	=	C3216 1UF16V	TDK
C12	=	C3216 1UF16V	TDK
C13	=	X7R 0.47UF25V	PHILIPS
C14	=	C3216 1UF16V	TDK
D1	=	BAS28	PHILIPS
D2	=	BZX84C5V1	PHILIPS
IC1	=	AD705JR	AD
IC2	=	ICL 7662 CBA	MAXIM
IC3	=	HCNR201	HP
IC4	=	AD705JR	AD
IC5	=	ICL 7662 CBA	MAXIM
R1	=	270K	MF/.125/200
R2	=	180K	MF/.125/200
R3	=	180K	MF/.125/200
R4	=	100K TRIMPOTM 11 TURNS	
R5	=	3.3M	MF/.125/200
R6	=	220K	MF/.125/200
R7	=	270	MF/.125/200
R8	=	180K	MF/.125/200
R9	=	180K	MF/.125/200
R10	=	220K	MF/.125/200
R11	=	100	MF/.125/200

WEEE (Waste Electrical & Electronic Equipment)

Correct Disposal of this Product

Applicable in the European union.



This marking shown on the product, its packing or its literature indicates that it should not be disposed with other wastes at the end of its working life, but should be collected separately to recycle it responsibly to promote the sustainable reuse of material resources.