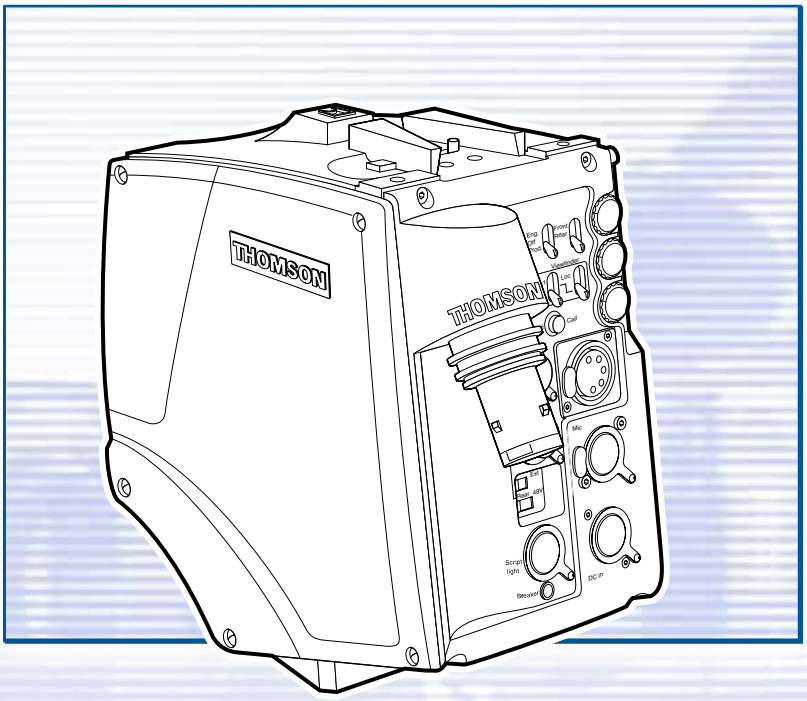
LDK 5400

Triax Adapter for LDK 100 Series



Technical Manual

3922 496 46791 St.03

THOMSON MULTI MEDIA
BROADCAST SOLUTIONS

Declaration of Conformity

We, Thomson Broadcast Solutions Nederland B.V., Kapittelweg 10, 4827 HG Breda, The Netherlands declare under our sole responsibility that this product is in compliance with the following standards:

- EN60065 : Safety
- EN55103-1 : EMC (Emission)
- EN55103-2 : EMC (Immunity)

following the provisions of:

a. the Safety Directives 73/23//EEC and 93/68/EEC
b. the EMC Directives 89/336/EEC and 93/68/EEC

FCC Class A Statement

This product generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause interference to radio communications.
It has been tested and found to comply with the limits for a class A computing device pursuant to Subpart J of part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment.
Operation of this product in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Copyright

LDK 5400
Triax Adapter

Technical Manual

Contents

About This Manual

Service policy
The LDK 5400 is a sophisticated triax adaptor containing state-of-the-art electronic components which are designed to provide long-life operation without the need for maintenance. With this in mind, the service policy of Thomson Multimedia Broadcast Solutions endeavours to ensure that help will be quickly on hand in the unlikely event of anything going wrong. The guiding principles of the Thomson Multimedia Broadcast Solutions first line maintenance philosophy are speed and cost effectiveness. First line maintenance is dedicated to keeping your camera operational, despite a fault, by module replacement and the replacement of minor mechanical parts by the user.

Purpose of this manual
The provision of correct information is the first step in ensuring the operational integrity of the camera. Information on the operation of the camera is to be found in the Operators's Manual.

This technical manual is an integral part of the service policy. It ensures that you will be able to install and set-up your camera to meet the requirements of your environment. This information on the installation of the triax adaptor is contained in Section 1 of the manual. The remaining sections of the manual provide first line service information so that suitably qualified service personnel can detect and repair faults, normally by module replacement.

Because of the complexity of some of the components, second line service can only be carried out at the specially equipped service centres and information concerning second line maintenance is not supplied in this manual.

Intended audience
The manual is intended as a guide to those with a working knowledge of camera systems and installation techniques. The first line detection and repair of faults requires a general knowledge of test and measurement techniques.

Structure of this manual
The manual is divided into 3 sections:

Section 1: Safety Information.
Contains important safety information and should be read before carrying out any work on the triax adaptor.

Section 2: Installation.
Gives instructions on the integration of the triax adaptor into the operating environment and the customization of certain hardware functions

Section 3: Replacements.
Gives information on the replacement of components at first line level.

Section 4: Adjustments.
Contains the adjustment procedures to be followed to obtain the best performance from the triax adaptor.

Section 5: Wiring Diagrams
Contains the wiring diagrams of the triax adaptor.

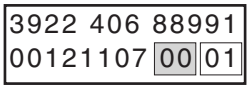
Section 6: Exploded Views
Contains the Exploded Views of the triax adaptor.

Section 7: Mechanical Partslist
Contains the Mechanical Partslist diagrams of the triax adaptor.

Identification and Status
To indicate the status of a drawing, a box with the numbers 0 to 9 is shown in the bottom-right of the drawing. The number that is crossed-out is the status number of the drawing. For example, in the illustration below, the status is 1.

0	1	2	3	4
5	6	7	8	9

A sticker is used on the units themselves to identify them and to indicate their status. For example, in the illustration below, the top line is the 12-digit number that identifies the unit type.



The first four digits of the number on the second line represent a date code (year, week); the next four digits represent the serial number for that week.

The number in the grey area indicates the status of the unit. The last two digits represent the number that will be given to the next status. However, if these two digits are contained in a box, then this is the current status. For example, in the illustration above, the current status of the unit is 01.

Line 1	3922 407 00000
Line 2	123456AA0101
Line 3	VR/0123456789

Line 1
This is the code number of the printed circuit board assy. (PCB)

Line 2
This is the serial number of the PCB. The first 6 digits and the 2 letters are for internal use. The last four digits reperesent the date of the manufacturing: wwyy.
Example:
123456AA1402 means the PCB is manufactured in week 14 of the year 2002.

Line 3
This is the status of the PCB.
The digit after the first slash is the status. If there is no number before the slash, it means that the status is less than 10, a 1 before the slash means the status is between 10 and 19, a 2 before the slash means between 20 and 29 etc.
Example:
- VR4567891012 means status 4
- VR3/78901234 means status 37.

Example of LDK number:
LDK 4501/01 means 8926 **450 10101**
LDK 4500/00 means 8926 **450 00001**

Numbers of printed circuit board assy
- 3922 406 xxxxx or 3922 407 xxxxx

Number (screened in PCB layout) of printed circuit board assy: 3922 411xxxxx. (not a sparepart)

Section 1

Safety Instructions

This section outlines the precautions that must be taken into account when using the LDK 100 camera head.

Contents

Safety Summary

This informaton is intended as a guide for trained and qualified personnel who are aware of the dangers involved in handling potentially hazardous electrical/electronic equipment. It is not intended to contain a complete list of all safety precautions which should be observed by personnel in using this or other electronic equipment.

The installation, maintenance and service of this equipment involves risks both to personnel and equipment and must be performed only by qualified personnel exercising due care.

Personnel engaged in the installation, operation, maintenance or servicing of this equipment are urged to become familiar with First Aid theory and practises.

During installation and operation of this equipment, local building safety and fire protection standards must be observed.

Before connecting the equipment to the power supply of the installation, the proper functioning of the protective earth lead of the installation needs to be verified.

Whenever it is likely that safe operation is impaired, the apparatus must be made inoperative and secured against any unintended operation. The appropriate servicing authority must then be informed. For example, safety is likely to be impaired if the apparatus fails to perform the intended function or shows visible damage.

This product has been designed and tested according to EN60065.

Cautions and Warnings

When performing service, be sure to read and comply with the warning and caution notices appearing in the manuals. Warnings indicate danger that requires correct procedures or practices to prevent death or injury to personnel. Cautions indicate procedures or practices that should be followed to prevent damage or destruction to equipment or property.

WARNING

THE CURRENT AND VOLTAGES PRESENT IN THIS EQUIPMENT ARE DANGEROUS. ALL PERSONNEL MUST AT ALL TIMES FOLLOW THE SAFETY REGULATIONS.

ALWAYS DISCONNECT POWER BEFORE REMOVING COVERS OR PANELS.

ALWAYS DISCHARGE HIGH VOLTAGE POINTS BEFORE SERVICING.

NEVER MAKE INTERNAL ADJUSTMENTS, PERFORM MAINTENANCE OR SERVICE WHEN ALONE OR WHEN FATIGUED.

IN CASE OF AN EMERGENCY ENSURE THAT THE POWER IS DISCONNECTED.

ANY INTERRUPTION OF THE PROTECTION CONDUCTOR INSIDE OR OUTSIDE THE APPARATUS, OR DISCONNECTION OF THE PROTECTIVE EARTH TERMINAL, IS LIKELY TO MAKE THE APPARATUS DANGEROUS. INTENTIONAL INTERRUPTION IS PROHIBITED.

FOR SAFETY REASONS THE CPU MUST BE MOUNTED IN A 19-inch RACK WHICH HAS SAFETY COVERS ACCORDING TO IEC65.

WHEN TWO CPUs ARE MOUNTED ABOVE EACH OTHER THE MINIMUM DISTANCE BETWEEN THEM MUST BE 50MM OR THE RACK MUST BE FORCE-AIR COOLED.

USE ONLY FUSES OF THE TYPE AND RATING SPECIFIED.

CAUTION

To prevent risk of overheating, ventilate the product correctly.

Connect the product only to a power source with the specified voltage rating.

Only connect a Triax cable from the LDK 6 camera family to an LDK 6 CPU. Never connect it to any other base station.

Never connect the Triax cable from a camera to a CPU of a different family; never connect the LDK family to the TTV family.

Do not allow system ground currents to exceed 1.5A in the outer shield of the triax cable or 0.2A in other cable shields.

It is strickly prohibited to short circuit the inner and outer shields of a triax cable used to connect a camera to a base station.

Earthing

Symbol	Colour	Explanation
	Red	High voltage terminal at which a voltage, with respect to an other terminal, exists or may be adjusted to 1000V or more.
	Yellow/Black	Live part.
	Yellow/Black	This marking indicates that the operator must refer to an explanation in the Instruction Manual, or that a specific component must be replaced by the component specified in the documentation for safety reasons.
	White/Black	Protective earth (ground) terminal.

Cathode ray tubes

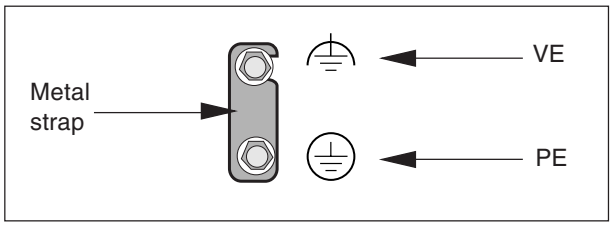
Components marked ⚠ on the circuit diagram are critical for safety and include those specified to comply with X-ray emission standards for units using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

When servicing units that use cathode ray tubes (CRTs), the cathode ray tubes themselves, the high voltage circuits and related circuits are specifically chosen so that they comply with recognized codes pertaining to X-ray emission.

Consequently, when servicing, replace the cathode ray tubes and other parts with specified parts only. Do not attempt to modify these circuits as any unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

Handle the cathode ray tube only when wearing shatterproof goggles and after discharging the high voltage completely.

The rear of a CPU has two separate screw terminals for protective earth ⏚ (PE) and video earth ⏚ (VE).



These are normally connected by a metal strap. The protective earth terminal is internally connected to the protective earth conductor of the power cable. If required, the central earth connection wire of the studio can be connected to terminal PE.

In normal circumstances the connection between the protective earth and the video earth should not be broken.

The metal strap may be removed only if the studio (or OB van) is equipped with separate protective and video earth systems. Under these circumstances the video earth terminal must be connected to the central functional earth potential (video earth) of the studio. This earth potential should have functional protective and noiseless earth (FPE) qualities as stated in the VDE regulation 0800/part2. A low impedance interconnection of both earth conductors must be provided at the central studio earthing point.

WARNING

THE UNIT MUST ALWAYS BE CONNECTED TO PROTECTIVE EARTH.

Mains Lead Wiring for UK Users

The wires in the mains lead are coloured in accordance with the following code:

GREEN AND YELLOW	-	EARTH
BLUE	-	NEUTRAL
BROWN	-	LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

- The wire coloured GREEN AND YELLOW must be connected to the terminal on the plug marked with the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN AND YELLOW.
- The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured RED.
- The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLACK.

Ensure that your equipment is connected correctly - if you are in any doubt consult a qualified electrician.

Section 2

Installation

This section provides information which is relevant when the adapter is to be used for the first time. Packing and unpacking instructions together with information on the integration of the adapter into your studio system are provided. The procedures for the customization of certain hardware functions and connector information is also provided.

Contents

Packing/Unpacking

Inspect the shipping container for evidence of damage immediately after receipt. If the shipping container or cushioning material is damaged, it should be kept until the contents of the shipment have been checked for completeness and the units have been checked mechanically and electrically.
The shipping container should be placed upright and opened from the top. Remove the cushioning material and lift out the contents.
The contents of the shipment should be checked against the packing list. If the contents are incomplete, if there is mechanical damage or defect, or if the units do not perform correctly when unpacked, notify your Thomson Multimedia Broadcast Solutions sales or service centre within eight days. If the shipping container shows signs of damage or stress, notify the carrier as well.

If a unit is being returned to Thomson Multimedia Broadcast Solutions for servicing, try to use the containers and materials of the original packaging. Attach a tag indicating the type of service required, return address, model number, full serial number and the return number which will be supplied by your Thomson Multimedia Broadcast Solutions service centre.

If the original packing can no longer be used, the following general instructions should be used for repacking with commercially available materials:

a. Wrap unit in heavy paper or plastic.
b. Use strong shipping container.
c. Use a layer of shock-absorbing material around all sides of the unit to provide firm cushioning and prevent movement inside container.
d. Seal shipping container securely.
e. Mark shipping container FRAGILE to ensure careful handling.

Attaching an Camera

The LDK 5400 Adapter is a unit that can be used with the LDK 100 Camera head. To attach an adapter to the camera head proceed as follow:

Caution

Be extremely careful with the connectors between the camera head and the adapter. Do not allow the guide pins to damage the pins of the connector.

Caution

Follow these steps in the order given. Tightening the screws in the wrong order could result in mechanical damage to the camera.

a. Using the rail ❶ on the bottom of the camera head as a guide, fit the guide pins ❷ on either side of the connector and the guide pin ❸ at the top rear of the camera head into the corresponding slots of the adapter.
b. First, tighten the two horizontal screws ❹ on the top of camera.
c. Next, tighten the two horizontal screws ❺ at the front of the camera.
d. Lastly, tighten the vertical screw ❻ in the handle of the camera.

Detaching an Camera

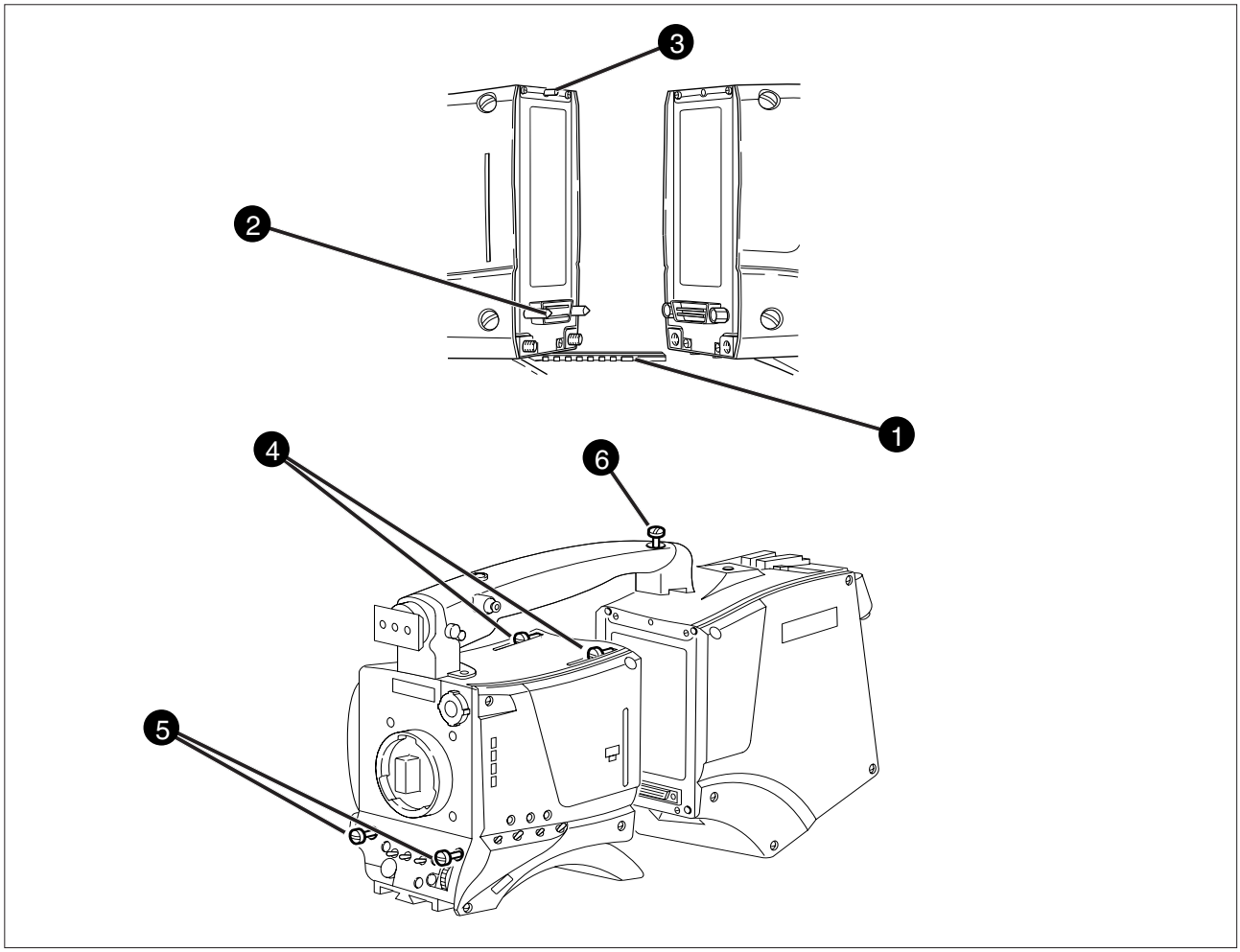
To detach an adapter from the camera head follow the steps for attaching it in the reverse order.

Caution

Loosening the screws in the wrong order could result in mechanical damage to the camera.

Note

The procedure is given for the TRiax adapter LDK 5400. Follow the same procedure for other adapters.



Hardware Customization

The camera is delivered in a ready-to-use state, however, there are occasions when it might be necessary to re-adjust some functions after, for example, fitting a new board.
A large number of functions can be set-up using the control facilities of the menu system. In addition to this software set-up there are some functions which can be selected or adjusted internally in the camera.
Refer to the next chapters for instructions.

Location of boards
Unsrew the five screws on the left side panel and swing down the cover.

❶ Data board

❷ Encoder board (**Option**)*

❸ Video Mux Ext-Rec board

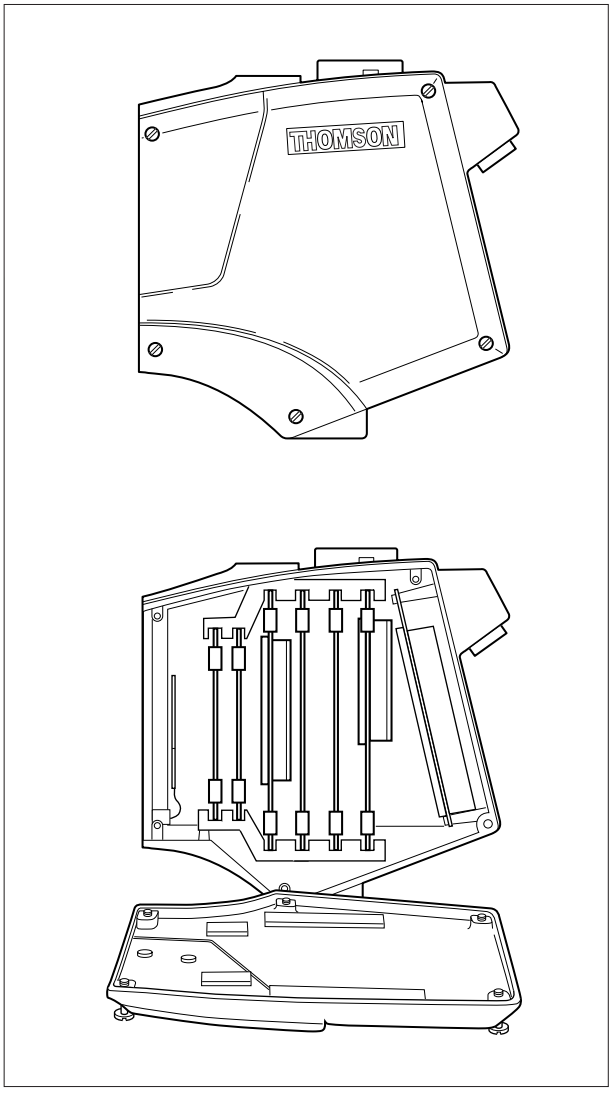
❹ Audio/Intercom TX-Rec board

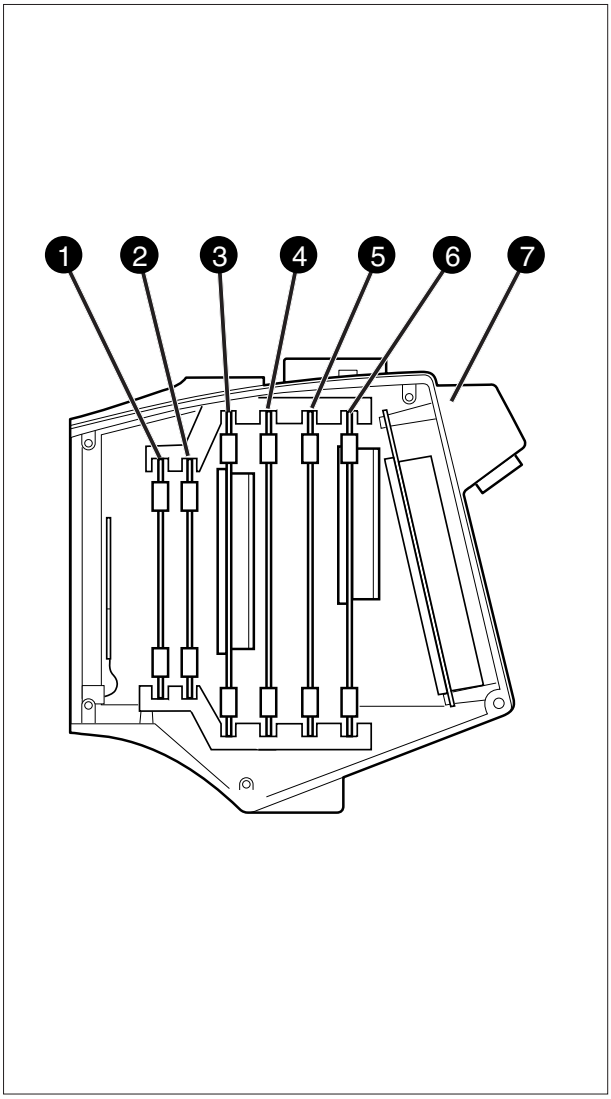
❺ Audio/Intercom LF board

❻ Power board

❼ Triax backpanel

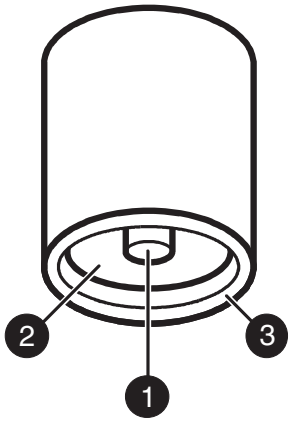
* LDK 5405/00 Encoder PAL
LDK 5405/50 Encoder NTSC





Connectors and Cables

Triax connector



3-pin; panel view
Cable part: see page 2-7

Fischer
1. Inner pin: Signals + power
2. Inner shield: Return
3. Outer shield: Camera housing

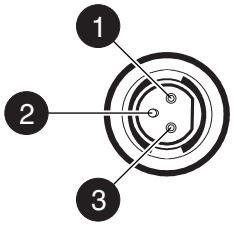
Trilock
1. Inner pin: Signals + power
2. Inner shield: Return
3. Outer shield: Camera housing

ARD
1. Inner pin: Signals + power
2. Inner shield: Return
3. Outer shield: Camera housing

part number 3922 040 01492

LEMO/ LEMO BBC/ LEMO3T
1. Inner pin: Signals + power
2. Inner shield: Return
3. Outer shield: Camera housing

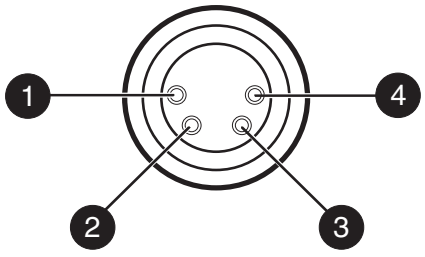
Script light connector



Fischer 3-pin female; panel view
Cable part: 2432 026 00274

1. +12V (Maximum Dissipation 3W)
2. Power Return
3. Shield

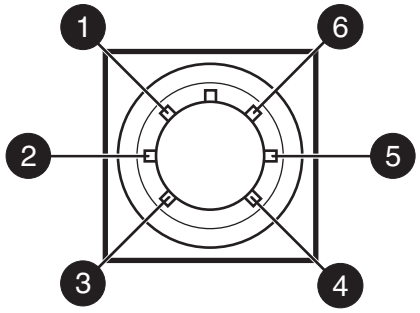
Power input connector



XLR4-pin male; panel view
Cable part: 5322 267 41043

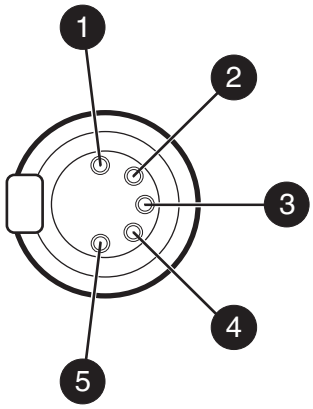
1. Gnd
2. n.c.
3. n.c.
4. +10,5V.....17V

Camera headset connector



1. Telephone left
2. Not connected
3. Microphone
4. Microphone return
5. Telephone right
6. Telephone return

Tuchel 6-pin female; panel view
Cable part: 5322 265 30365

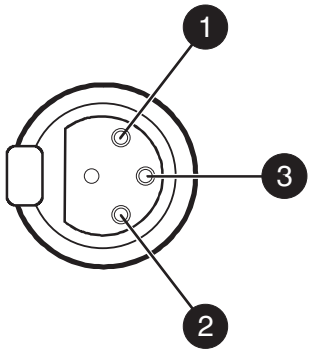


1. Microphone return
2. Microphone
3. Telephone return
4. Telephone left
5. Telephone right

- Microphone level -58dBm/-20dBm switchable
- Microphone impedance 200 ohm
- Telephone level +6dBm nominal
- Telephone output impedance <10 ohm

XLR 5-pin female; panel view
Cable part: 2422 026 03393

Audio microphone connectors



1. Audio Screen
2. Audio In
3. Audio Return

- Microphone impedance > 200 ohm
- Sensitivity remote controlled via base station:
  range: -70 to -28 dBm
  maximum input = -6 dBm
- Signal at pin 2 of audio input is in phase with signal at pin 2 of audio output on Base Station

XLR 3-pin female; panel view
Cable part 5322 267 41055

Panel Connector assy

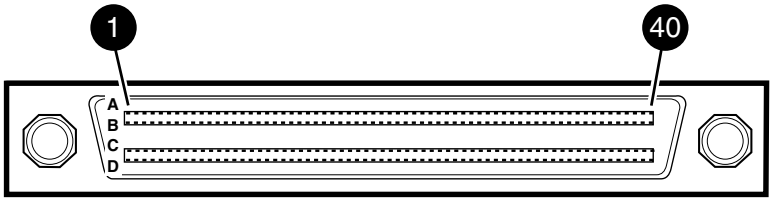
Panel Connector	Type		Part number	Cable part number
Triax	3-pin	Fischer	5322 218 11775	**
Triax	3-pin	Trilock	5322 218 11778	--
Triax	3-pin	ARD	5322 218 11776	--
Triax	3-pin	Lemo	5322 218 11777	--
Triax	3-pin	Lemo BBC	5322 218 11774	--
Triax	3-pin	Lemo 3T	3922 407 34471	--
Headset	6-pin	Tuchel female	5322 265 11108	--
Headset	5-pin	XLR female	5322 265 11107	--

Cable partnr: LDK8200/ (only Fisher connectors)**

/02 for 8mm cable female	/00 for 8mm cable male
/05 for 11mm cable female	/10 for 11mm cable male
/10 for 14mm cable female	/20 for 14mm cable male

Docking connector Adapter

A row	name	B row	name	C row	name	D row	name
1	Ion data	1	Ion data N	1	GND	1	+ batt
2	SDA_C	2	SCL_C	2	GND	2	+ batt
3	INTN_C	3	audio indication	3	GND	3	+ batt
4	AB batt sense	4	batt sense	4	GND	4	+ batt
5	adpt id 0	5	adpt id 1	5	GND	5	+ batt
6	adpt id 2	6	adpt id 3	6	GND	6	+ batt
7	cam id 0	7	cam id 1	7	GND	7	+ batt
8	48 kHz	8	PIP	8	GND	8	+ batt
9	sync	9	blanking	9	GND	9	
10	white pulse 1	10	white pulse 2	10	GND	10	
11	colour framing	11	frame reset	11	GND	11	
12	BS_TDA	12	H lock	12	GND	12	
13	PIP video	13	PIP video ret	13	GND	13	
14	BS_TDV	14	BS_TMS	14	GND	14	
15	adapter vf video	15	adapter vf video ret	15	GND	15	
16	BS_TCK	16	BS_TRSTN	16	GND	16	GND
17	ext video	17	ext video ret	17	GND	17	GND
18	-5V	18	-5V	18	-5V	18	-5V
19	+5V	19	+5V	19	+5V	19	+5V
20	+3.3V	20	+3.3V	20	+3.3V	20	+3.3V
21	+5VD	21	+5VD	21	+5VD	21	+5VD
22	shield	22	shield s	22	GND	22	GND
23	mic X	23	mic Xs	23	GND	23	GND
24	mic Y	24	mic Ys	24	GND	24	
25	audio level	25	audio level ref	25	GND	25	
26	power switch	26		26	GND	26	
27	R	27	R ret	27	GND	27	
28	YC clock	28	YC clock ret	28	GND	28	
29	G	29	G ret	29	GND	29	
30	YC9	30	YC9 ret	30	GND	30	
31	B	31	B ret	31	GND	31	
32	YC8	32	YC8 ret	32	GND	32	
33	YC7	33	YC7 ret	33	GND	33	
34	YC6	34	YC6 ret	34	GND	34	housing
35	YC5	35	YC5 ret	35	GND	35	housing
36	YC4	36	YC4 ret	36	GND	36	housing
37	YC3	37	YC3 ret	37	n.c.	37	
38	YC2	38	YC2 ret	38	n.c.	38	
39	YC1	39	YC1 ret	39	-80V	39	
40	YC0	40	YC0 ret	40	-80V	40	



160-pin female; panel view

Specifications

LDK 100 (with Triax adapter)

General data

Power requirements triax powered or 12V dc
Power consumption 20 W (Head + VF)

Operating temperatures
-20 to +45°C (-4 to +113°F)
Storage temperatures
-20 to +60°C (-4 to +140°F)

Weight (approx.)
4.9 kg (14.1 lb) incl. 1.5-inch VF and triax adapter

Triax cable length
2,400m (7,875 ft) max. with 16mm (0.63") cable

Camera section

Pick-up device
3 x 2/3-inch Philips Frame Transfer Sensors or
3 x 2/3-inch switchable DPM Sensors

Picture elements
NTSC: 1000(h) x 498(v)
PAL: 1000(h) x 594(v)
Digital quantization
12 bits A/d
Digital signal processing
18 MHz and 36 MHz, 24 bits accuracy
Sensitivity
2000 lux (186 ft cd) at F9.0 reflectance 89.9%
Minimum illumination
Approx. 1 lux at F 1.4 and +36 dB gain
Exposure control
Down to 1/1000
Clean scanning
NTSC: between 61.1 and 151.0 Hz
PAL: between 51.0 and 103.0 Hz
Optical system
F1.4 with quartz filter
Optical filters
Clear; 1/4 ND, 1/16 ND, 1/64 ND
Modulation depth
>70% at 5Mhz
S/N ratio
Typical: 60 dB PAL and 62 dB NTSC
Registration
<25 ns (0.05%) in all zones, without lens
Dynamic range
>600%
Gain
-6dB to +36dB in 3dB steps (user defined presets)

Inputs

Front mic.	1 x XLR 3, balanced, +48V
Mic.	1 x XLR 3, balanced, +48V
DC 12V	XLR 4
Control input	9-pin, RS232 compatible

Outputs

Triax	Option: Fischer/ARD/Lemo/ Trilock
Lens	12p
Viewfinder	20p
Cameraman headset	Option: XLR5/Tuchel
Video (CVBS) out	Option: 1 Vpp; 75 Ohm; BNC
Monitor (Y)	1 Vpp; 75 Ohm; BNC
Scriptlight power	3p; 12V

Connectors Base Station LDK 4053

Triax	Option: Fischer/ARD/Lemo/ Trilock
Power	AC-power connector
Audio	XLR 3
Intercom	ENG/PROD/PROG via 15p D-connector
Signalling	Call/Tally R/Y via 15p D-conn.
CVBS (3x)	1 Vpp; 75 Ohm; BNC
RGB	700 mVpp; 75 Ohm; BNC
Y, R-Y, B-Y	700, 525, 525 mVpp; 75 Ohm; BNC
PXM	1 Vpp; 75 Ohm; BNC
WFM	1 Vpp; 75 Ohm; BNC
Serial Digital (2x) 270 MB/s	Option: 800 mV; 75 Ohm; BNC
Ext 1	1 Vpp; 75 Ohm; BNC
Genlock in	1 Vpp; 75 Ohm; BNC
Ext. Camera Control	4p DATA

These typical specifications are valid for PAL and NTSC systems and are subject to change without notice

Section

Replacements

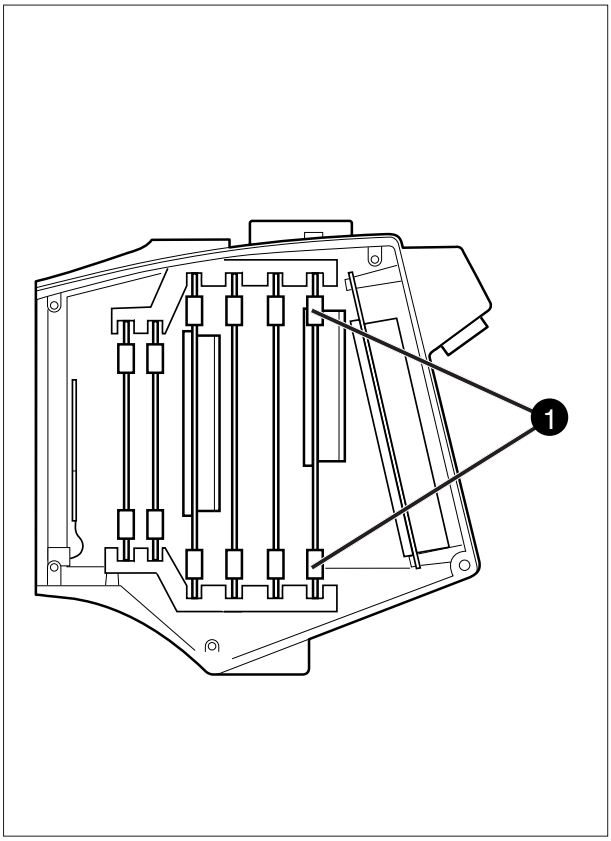
This section gives information on the procedures to follow when replacing printed circuit boards and mechanical components at first line level.

Contents

Introduction

The instructions given in this section are restricted to those modules which can be replaced at the first line level. After a printed circuit board has been replaced it is sometimes necessary to carry out adjustments to match the new boards to your camera and so maintain the performance levels. The relevant adjustment procedures are referenced in section 3.
The procedures for removing the modules should be followed in reverse order when remounting the units.

Printed circuit boards



a. Remove left cover. (see section 1)
b. Turn the print ejector ❶ of the printed circuit board on the top upwards and under downwards.
c. Pull horizontally on this covers to free the board from its connector and slide it clear of the camera.

Section 4

Adjustments

This section contains the adjustment procedures to be followed to obtain the best performance from the camera. These procedures need only be used if, following a module replacement, the camera does not perform according to specifications.

Contents

Introduction

This unit is factory tested and adjusted for operational use. Under normal circumstances, the internal automatic calibration procedures do not need to be started and the internal potentiometers do not need to be adjusted.

The only situation that might require some realignment of the adapter is when a printed circuit board has been replaced.

If the Video Mux. board is replaced, readjust the white pulse amplitude.

If the Encoder board is replaced, follow the procedure for its readjustment. The encoder timing adjustments can be carried out via the menu system.

If it is discovered that the unit is misaligned, the following procedures are given as a guide for competent service personnel, who have a thorough knowledge of the camera and have the use of calibrated equipment, to realign the unit.

If no improvement can be achieved or an adjustment is out of range, please contact your local supplier or the nearest Thomson Multimedia Broadcast Solutions Service Centre.

The adjustment procedures are designed as separate units. Within a numbered procedure do not change the position of switches or jumpers unless instructed to do so in the procedure.

These adjustment procedures are for the Triax Adapter. However, for practical purposes the Triax Adapter is used together with the camera head to facilitate some measurements.

Test Equipment

The following is a list of equipment required to carry out the adjustment procedure:

- Set of board extenders LDK 5820/01
- Oscilloscope (with cursor measurement)
- Waveform monitor

Set-up Instructions

Before carrying out any adjustments the following steps are recommended:

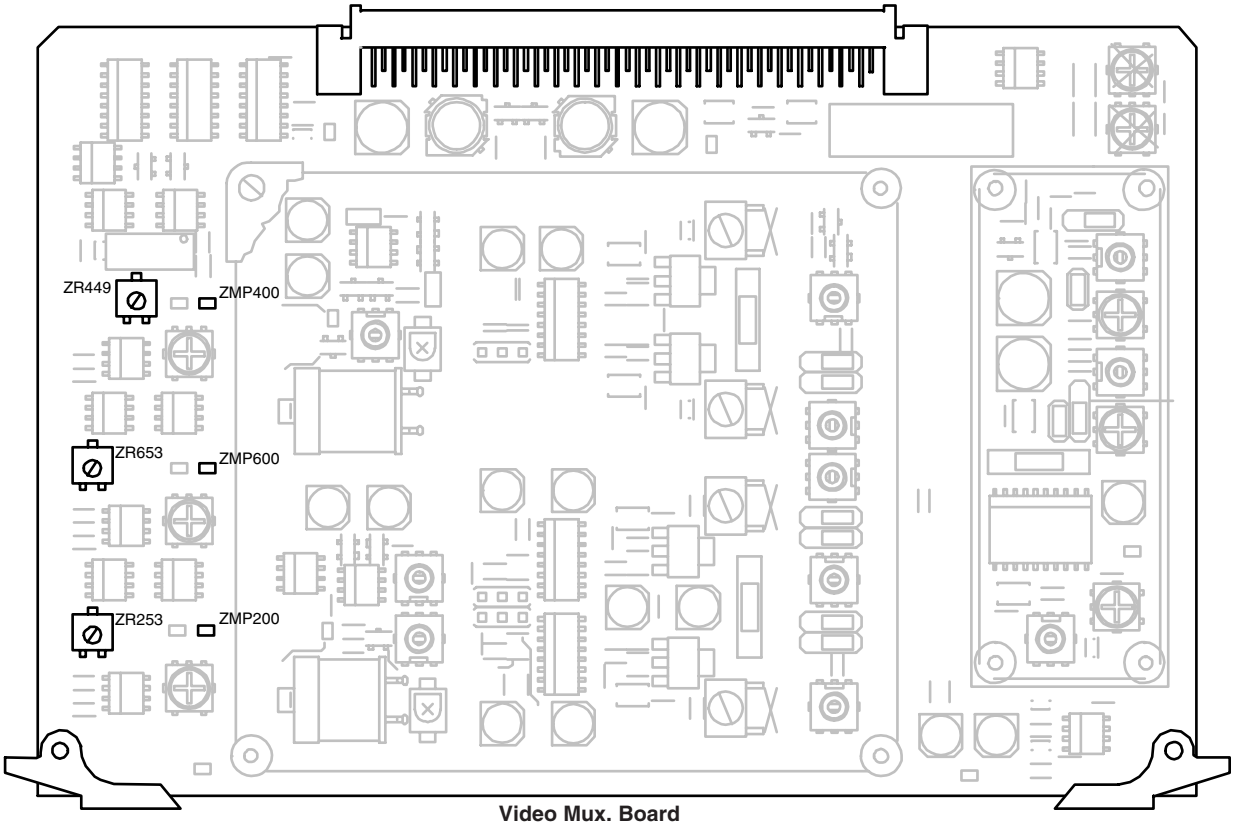
- Attach the adapter to the camera.
- Install the camera on a tripod.
- Attach the lens and the necessary cables.
- Allow the camera to warm-up.

CAUTION:
Do not attempt to improve camera performance
by adjusting individual potentiometers, jumpers or switches
as this may lead to complete misalignment of the camera.

CAUTION:
Do not realign individual potentiometers, jumpers or switches
not mentioned in this chapter or earlier in this manual.
These adjustment points are for factory use only.

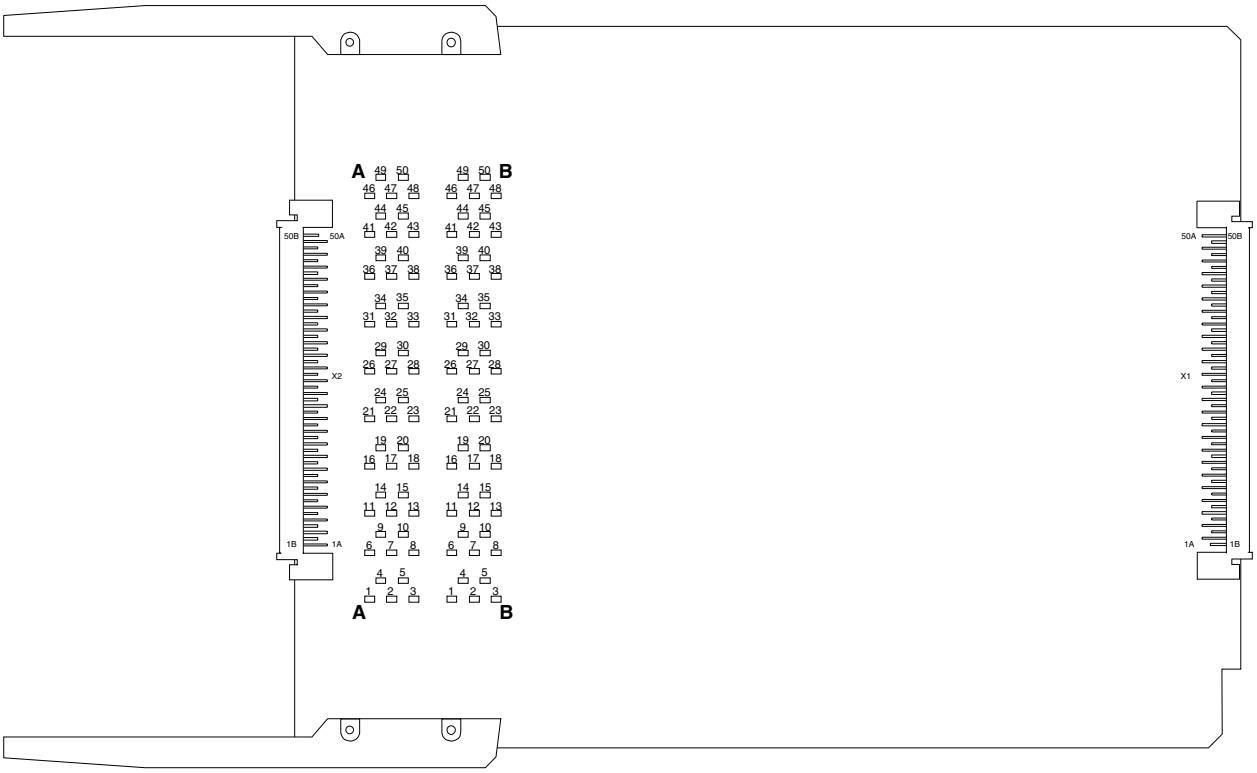
CAUTION:
Switch off the power supply to the camera
before removing or replacing printed circuit boards.

White Pulse Gain



Video Mux. Board

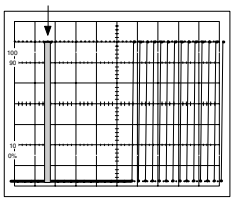
Extender Board



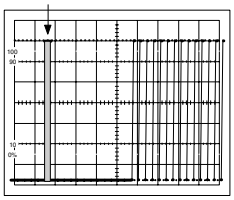
White Pulse Gain

White pulse amplitude

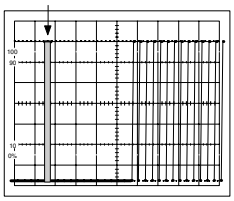
1. Switch off power. Place Video Mux.board on service extender. Switch on power.
2. Connect adapter to a base station and switch on colour bar.
3. Adjust the white pulse in line 10 (PAL), in line 13 (NTSC) for the R-Mux output to equal the video level.

Measure at:	Adjust with:	Required result:	Correct:
ZMP200	ZR253	700mV	

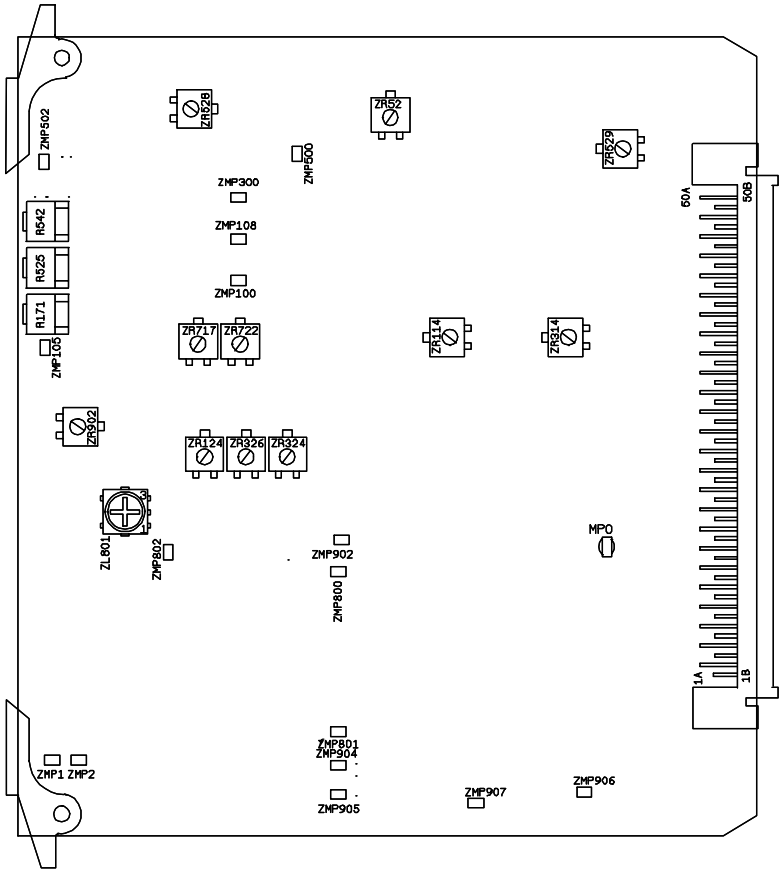
4. Adjust video level to equal the white pulse in line 10 (PAL), in line 13 (NTSC) for the G-Mux output.

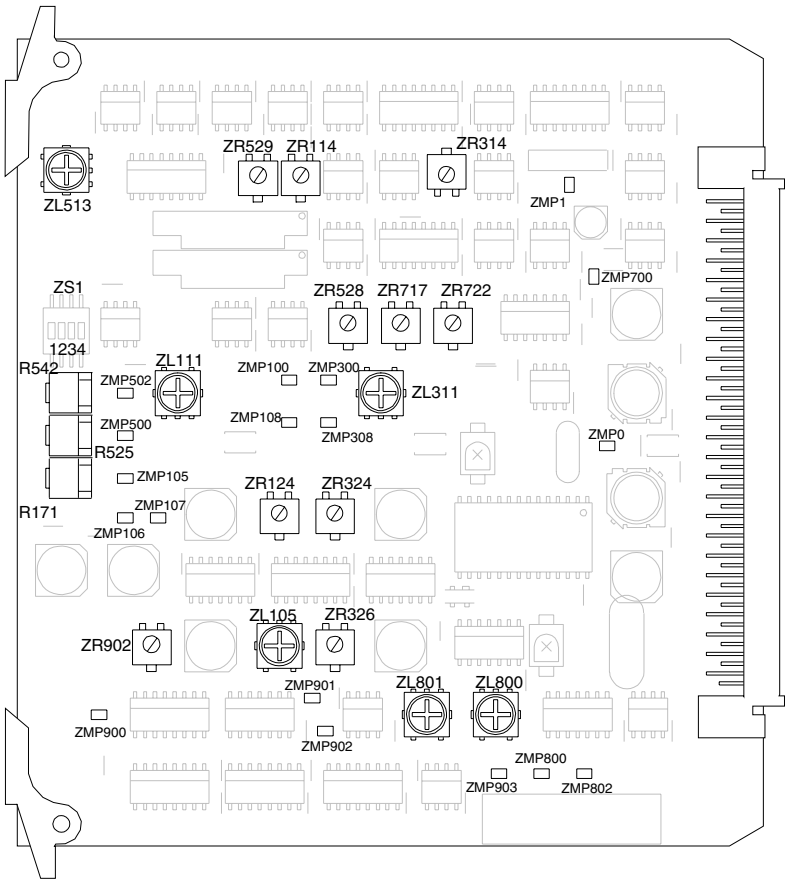
Measure at:	Adjust with:	Required result:	Correct:
ZMP400	ZR449	700mV	

5. Adjust the white pulse in line 11 (PAL), in line 14 (NTSC) for the B-Mux output to equal the video level.

Measure at:	Adjust with:	Required result:	Correct:
ZMP600	ZR653	700mV	

Encoder Board PAL





Encoder Board PAL

Set-up

1. Switch off power. Place encoder board on service extender. Genlock camera with black burst signal. Switch on power.
2. Connect oscilloscope via a vectorscope terminated with 75 Ohm to the CVBS output.
3. Switch on colour bar.

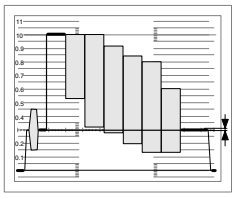
Black balance

4. Turn chroma potentiometer R171 on encoder board fully clockwise (max. chroma).
5. Adjust the I and Q balance potentiometers for minimum unbalance in black.

Measure at:	Adjust with:	Required result:	
CVBS out	ZR124 ZR324	Smallest possible dot in centre of vectorscope	

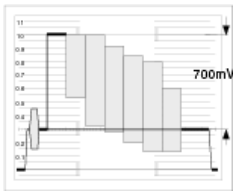
CVBS offset

6. Adjust the CVBS offset potentiometer to place the black bar at 0 Vdc.

Measure at:	Adjust with:	Required result:	Correct:
CVBS out	ZR529	Black bar = 0 Vdc	

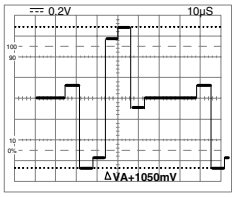
CVBS amplitude

7. Adjust the CVBS gain potentiometer to obtain an output amplitude of 700mV.

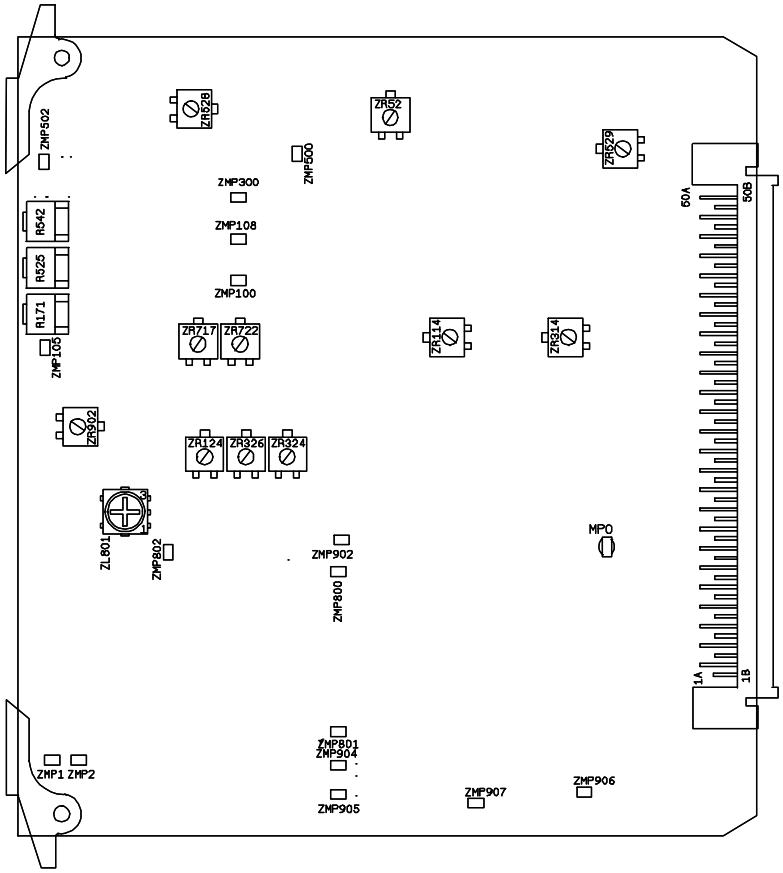
Measure at:	Adjust with:	Required result:	Correct:
CVBS out	R542	700mV	

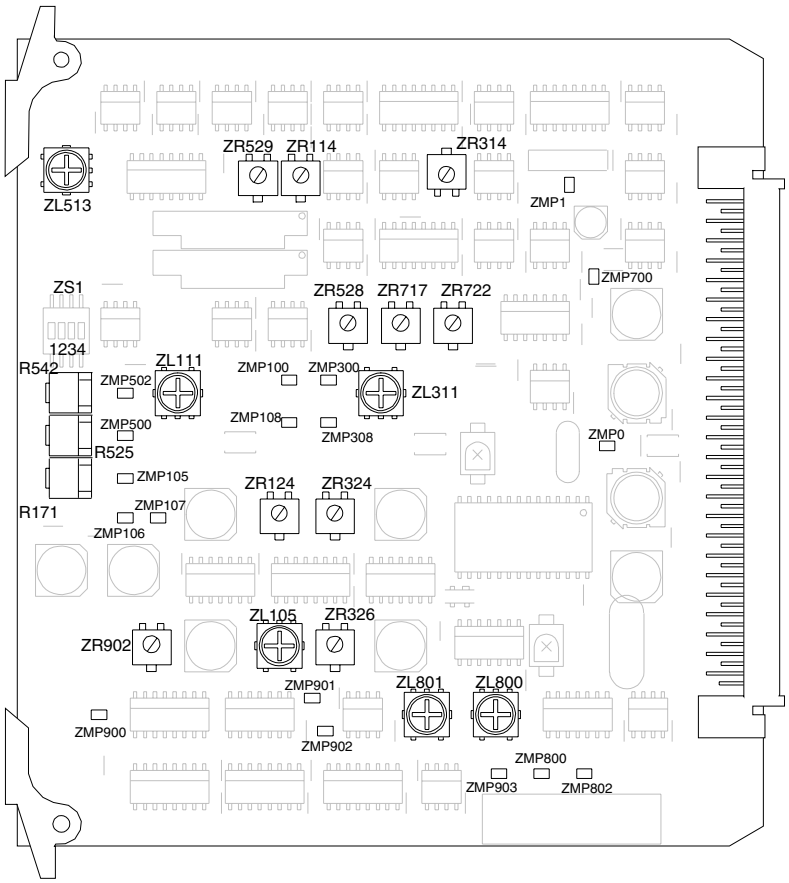
R-Y amplitude

8. Adjust the R-Y potentiometer to obtain an output amplitude of 1050 mV

Measure at:	Adjust with:	Required result:	Correct:
X21-8A	R314	1050mV	

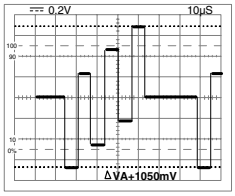
Encoder Board PAL





B-Y amplitude

9. Adjust the B-Y gain potentiometer to obtain an output amplitude of 1050mV.

Measure at:	Adjust with:	Required result:	Correct:
X21-11A	ZR114	1050mV	

BURST ADJUSTMENTS

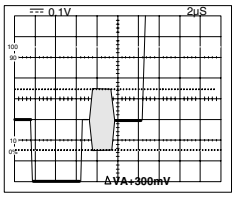
Burst phase

10. Measure in second quadrant of vectorscope.
    Adjust the input sensitivity potentiometer of the vectorscope so the burst vectors just touch the circle graticule.
11. Adjust the burst phase potentiometer for 90° phase output.

Measure at:	Adjust with:		
CVBS out	ZR722		

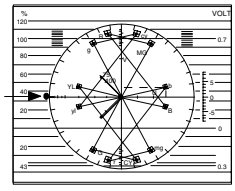
Burst amplitude

12. Adjust the burst amplitude potentiometer to obtain a burst amplitude of 300mV.

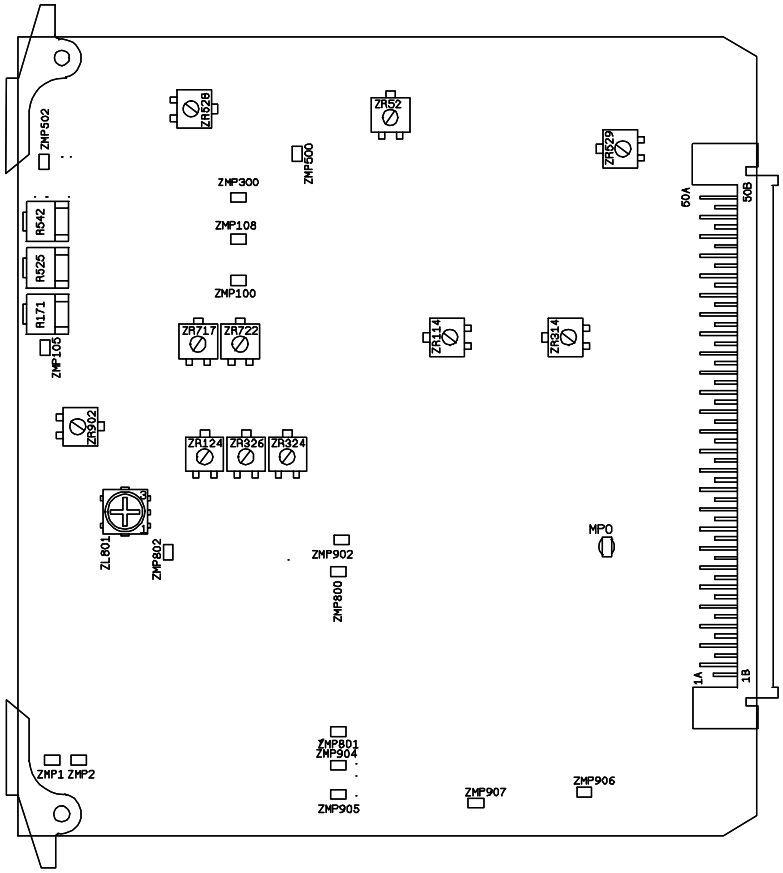
Measure at:	Adjust with:	Required result:	Correct:
CVBS out	ZR717	300mV	

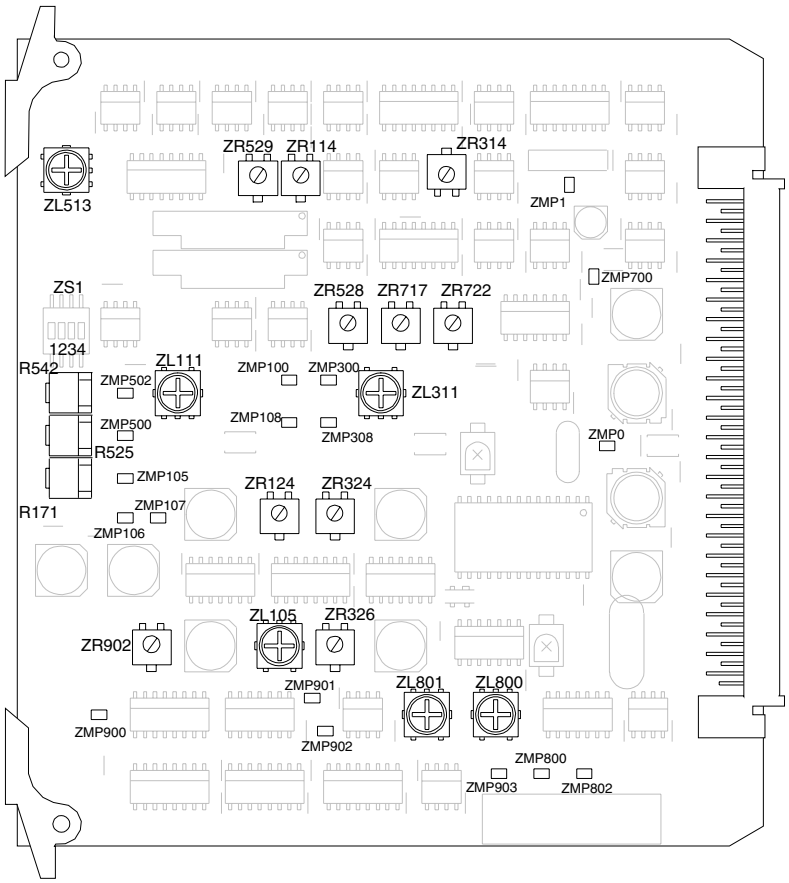
Sc-H phase relationship

13. Switch vectorscope to internal synchronisation.
14. Adjust Sc-H phase potentiometer for 180°.

Measure at:	Adjust with:	Required result:	Correct:
CVBS out	ZR902		

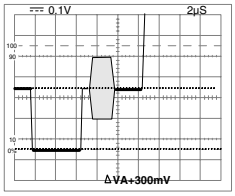
Encoder Board PAL





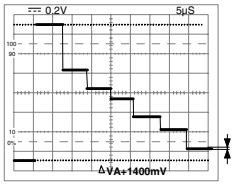
Sync amplitude

15. Adjust the sync, amplitude potentiometer fto obtain a sync. ampliatude of 300mV.

Measure at:	Adjust with:	Required result:	Correct:
CVBS out	ZR525	300mV	

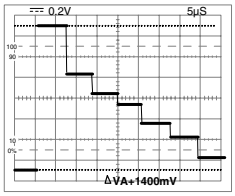
Y offset

16. Adjust the Y offset potentiometer to place the black bar at the 0Vdc level.

Measure at:	Adjust with:	Required result:	Correct:
X21-14A	ZR52	Black bar = 0 Vdc	

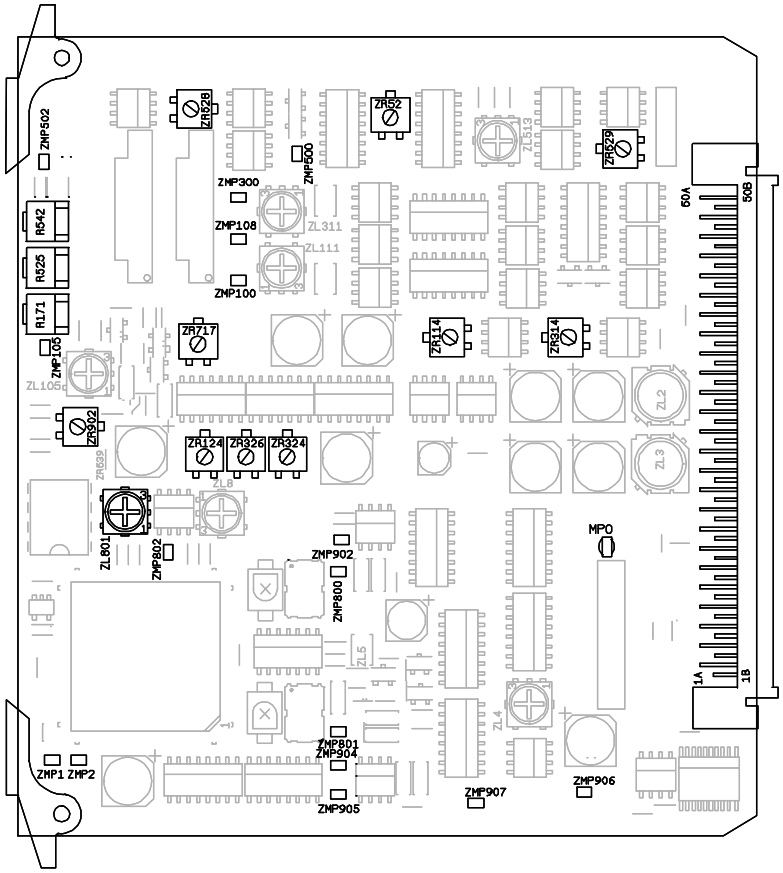
Y amplitude

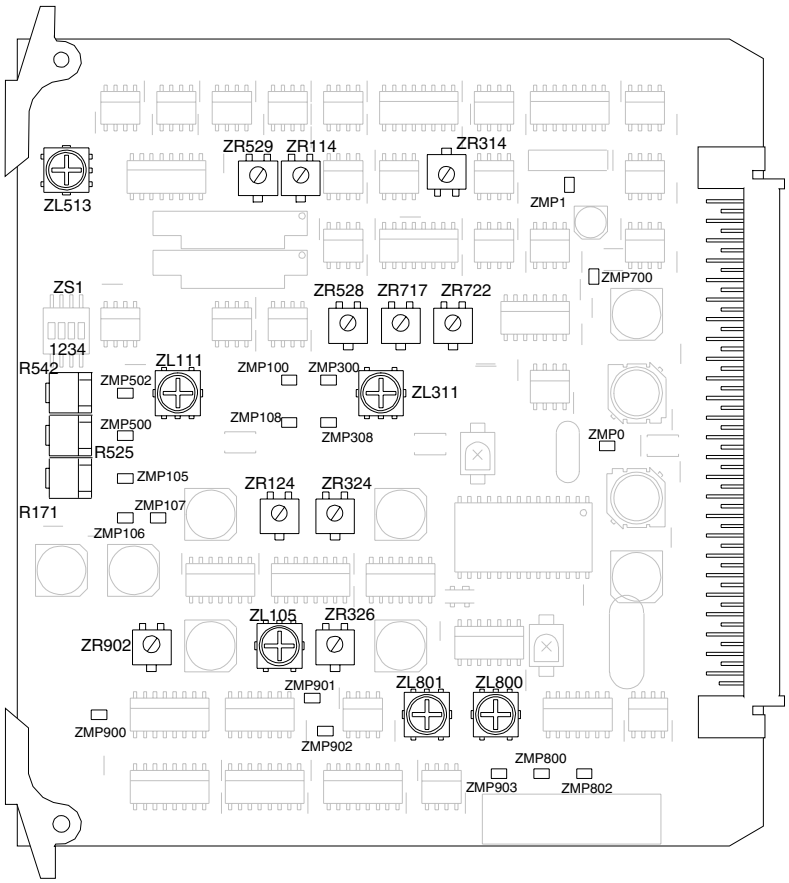
17. Adjust the Y gain potentiometer to obtain an output amplitude of 1400mV.

Measure at:	Adjust with:	Required result:	Correct:
X21-14A	ZR528	1400mV	

18. Switch off power and return encoder board to its position in the camera.

Encoder Board NTSC





Encoder Board NTSC

Set-up

1. Switch off power. Place encoder board on service extender. Genlock camera with black burst signal. Switch on power.
2. Connect oscilloscope via a vectorscope terminated with 75 Ohm to the CVBS output.
3. Switch on colour bar.

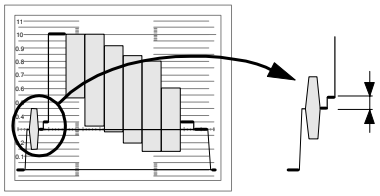
Black balance

4. Turn chroma potentiometer R171 on encoder board fully clockwise (max. chroma).
5. Adjust the I and Q balance potentiometers for minimum unbalance in black.

Measure at:	Adjust with:	Required result:	
CVBS out	ZR124 ZR324	Smallest possible dot in centre of vectorscope	

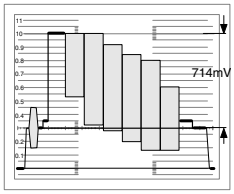
CVBS offset

6. Adjust the CVBS offset potentiometer to place the black bar at 50 mVdc.

Measure at:	Adjust with:	Required result:	Correct:
CVBS out	ZR529	Black bar = 50mV	

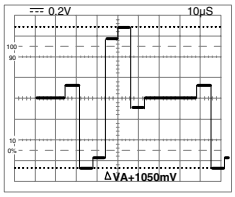
CVBS amplitude

7. Adjust the CVBS gain potentiometer to obtain an output amplitude of 714mV.

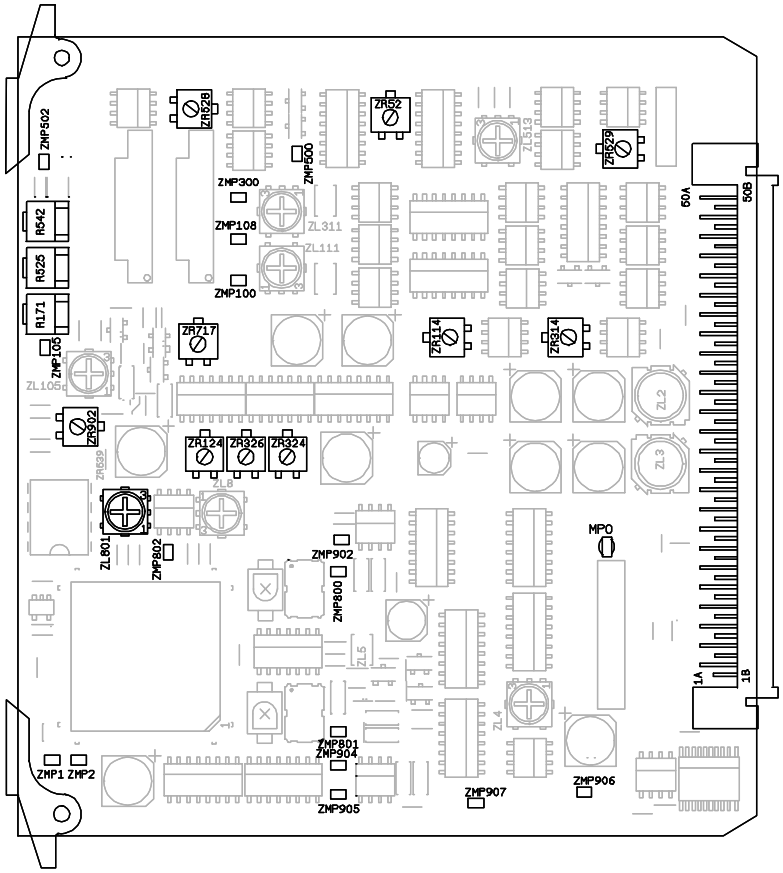
Measure at:	Adjust with:	Required result:	Correct:
CVBS out	R542	714mV	

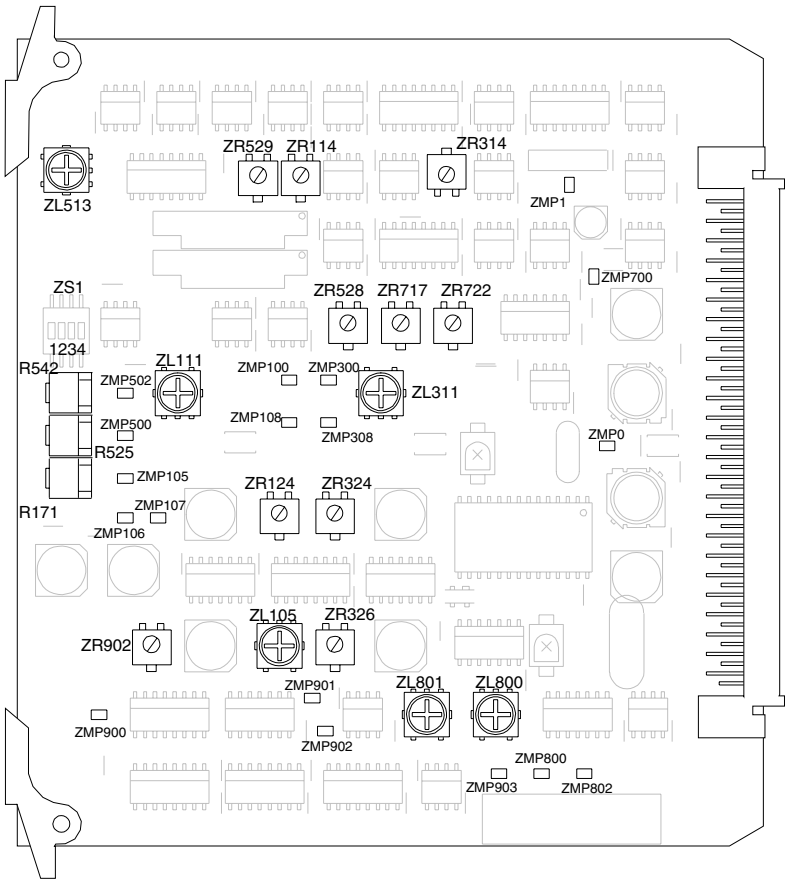
R-Y amplitude

8. Adjust the R-Y potentiometer to obtain an output amplitude of 1050 mV

Measure at:	Adjust with:	Required result:	Correct:
X21-8A	R314	1050mV	

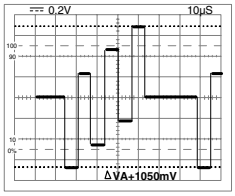
Encoder Board NTSC





B-Y amplitude

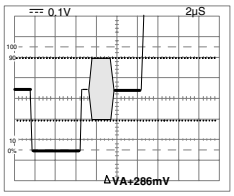
9. Adjust the B-Y gain potentiometer to obtain an output amplitude of 1050mV.

Measure at:	Adjust with:	Required result:	Correct:
X21-11A	ZR114	1050mV	

BURST ADJUSTMENTS

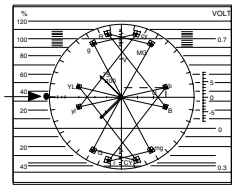
Burst amplitude

10. Adjust the burst amplitude potentiometer to obtain a burst amplitude of 286mV.

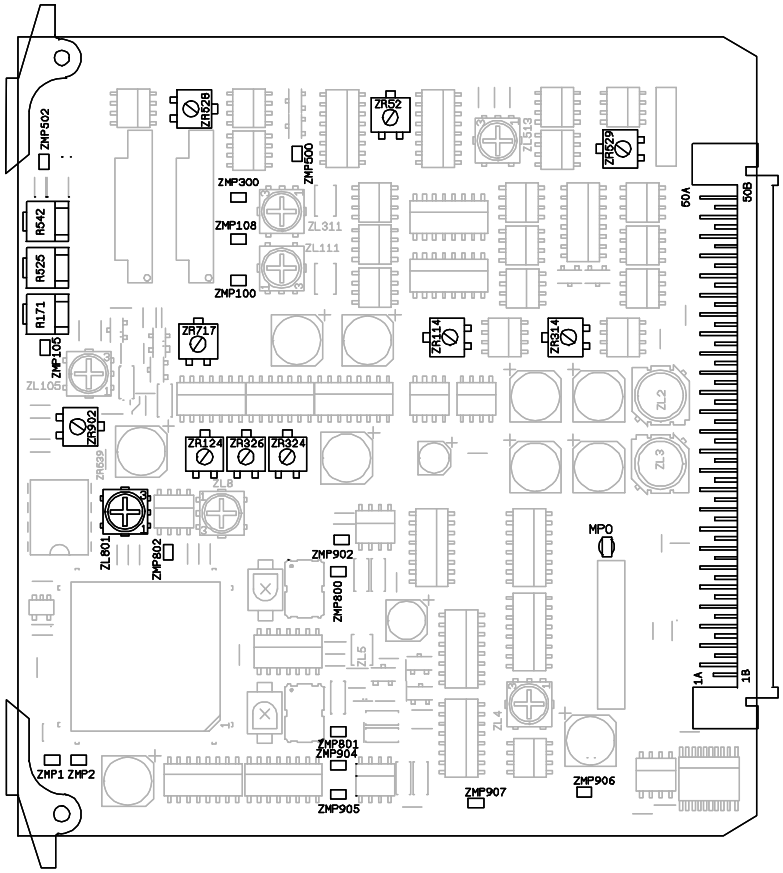
Measure at:	Adjust with:	Required result:	Correct:
CVBS out	ZR717	286mV	

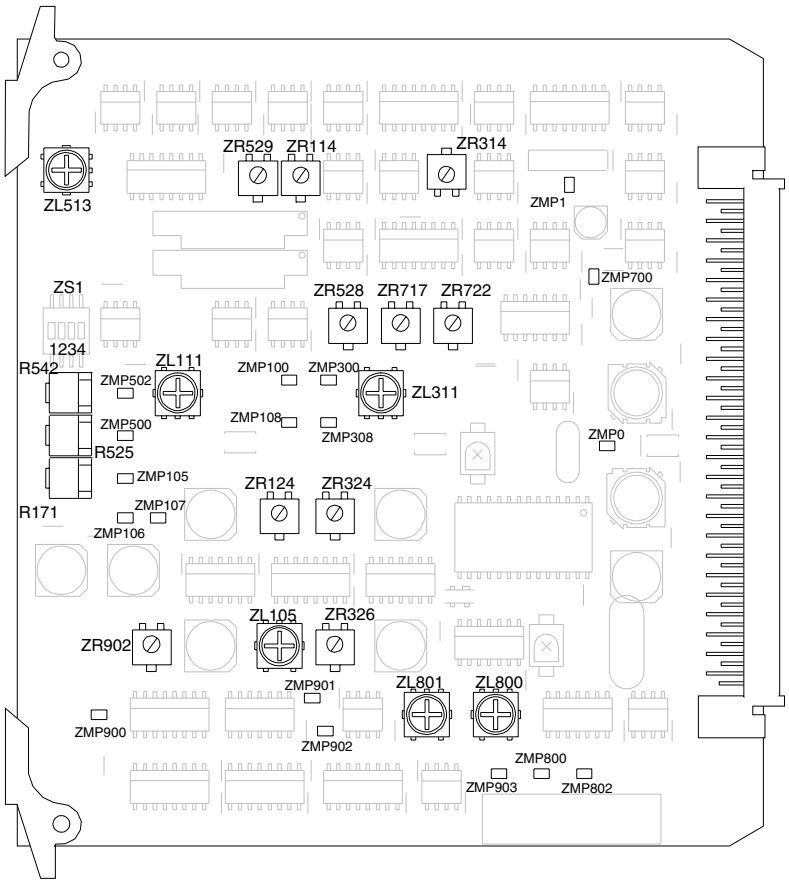
Sc-H phase relationship

11. Switch vectorscope to internal synchronisation.
12. Adjust Sc-H phase potentiometer for 180°.

Measure at:	Adjust with:	Required result:	Correct:
CVBS out	ZR902		

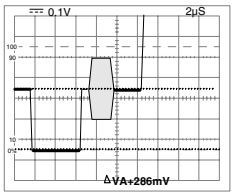
Encoder Board NTSC





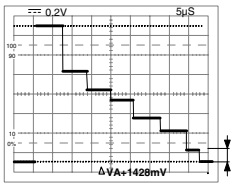
Sync amplitude

13. Adjust the sync, amplitude potentiometer fto obtain a sync. ampliatude of 286mV.

Measure at:	Adjust with:	Required result:	Correct:
CVBS out	ZR525	286mV	

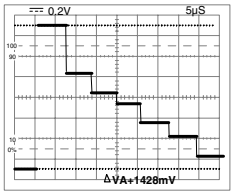
Y offset

14. Adjust the Y offset potentiometer to place the black bar at the 50mVdc level.

Measure at:	Adjust with:	Required result:	Correct:
X21-14A	ZR52	Black bar = 50mV	

Y amplitude

15. Adjust the Y gain potentiometer to obtain an output amplitude of 1428mV.

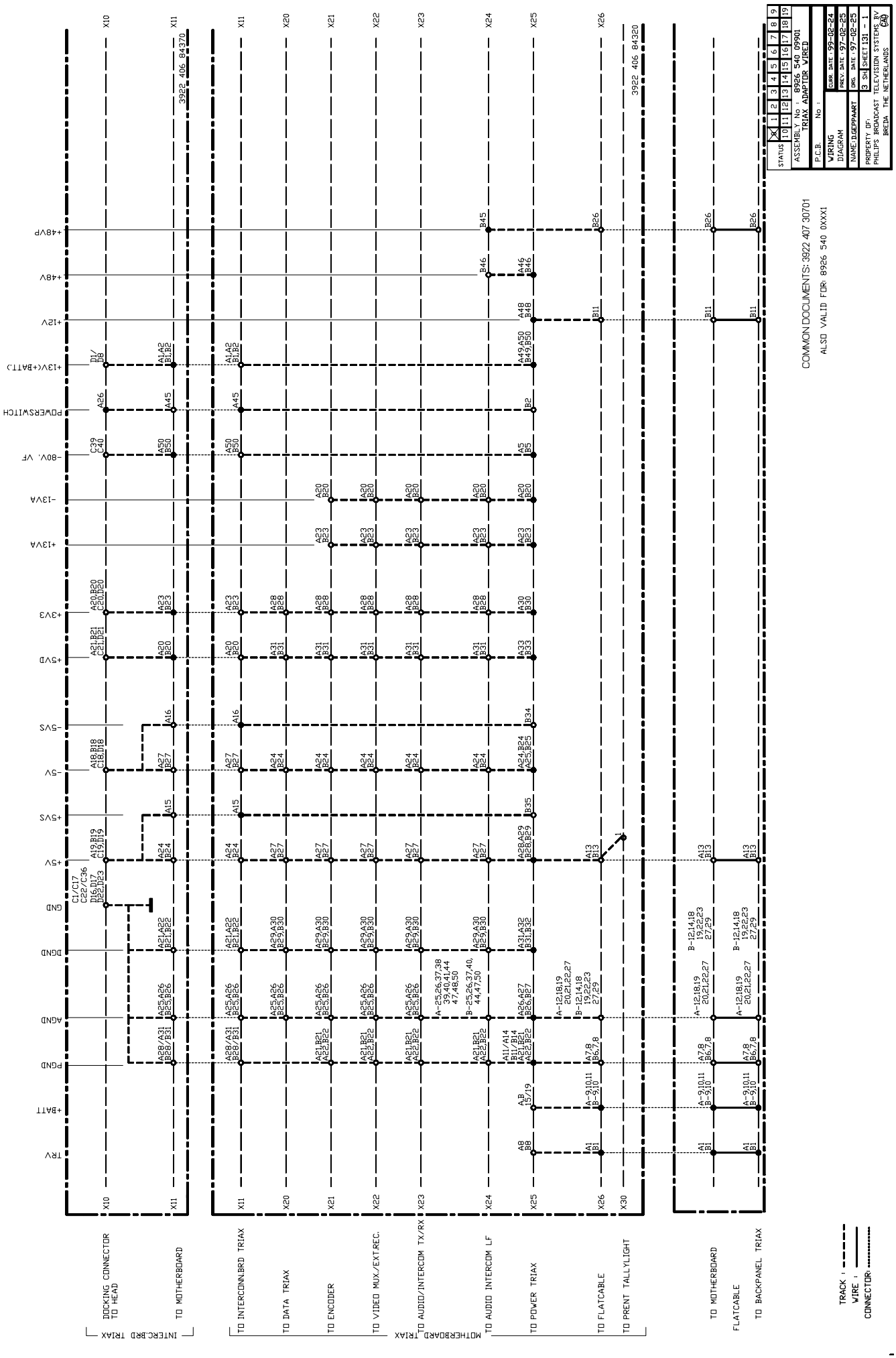
Measure at:	Adjust with:	Required result:	Correct:
X21-14A	ZR528	1428mV	

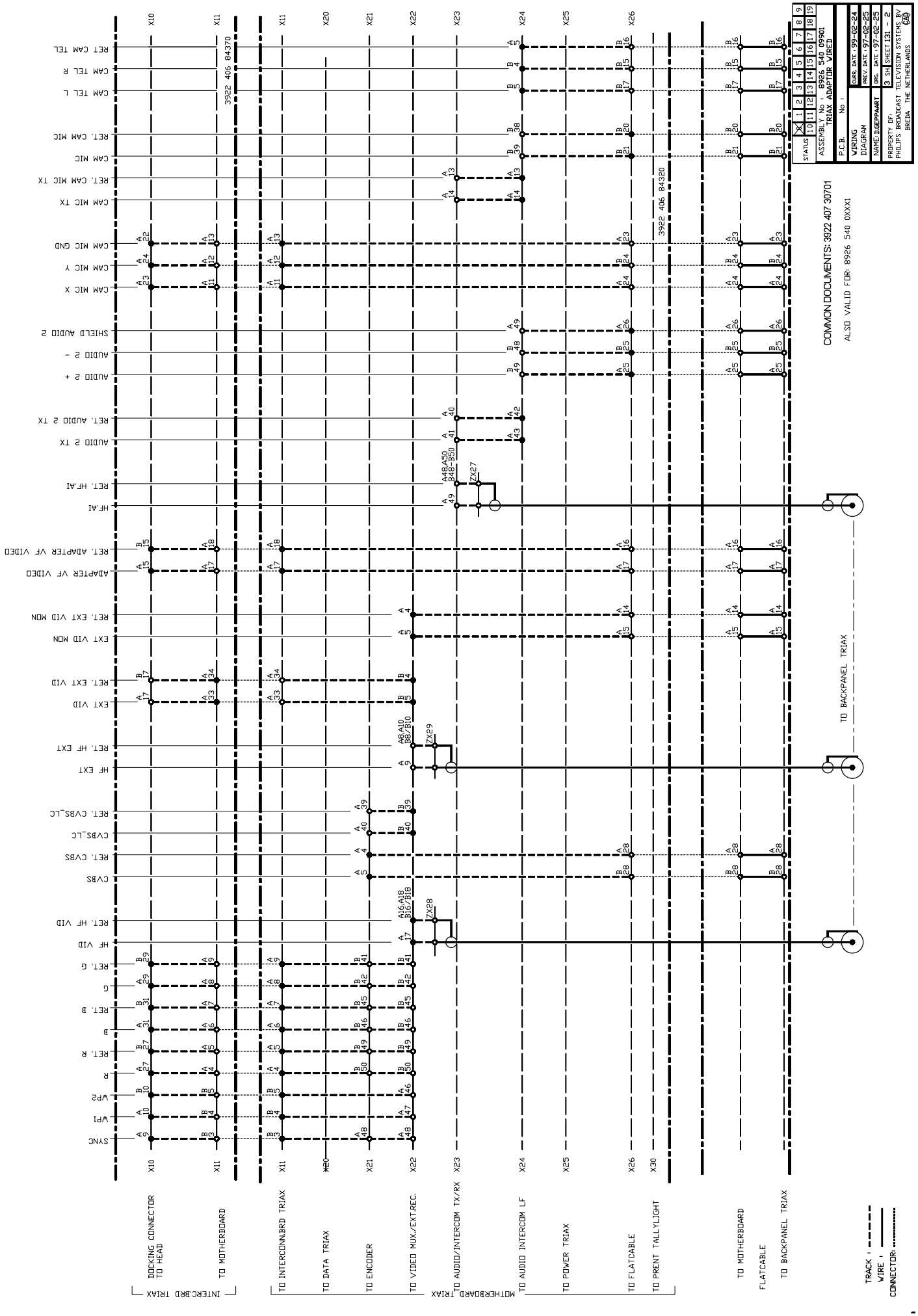
16. Switch off power and return encoder board to its position in the camera.

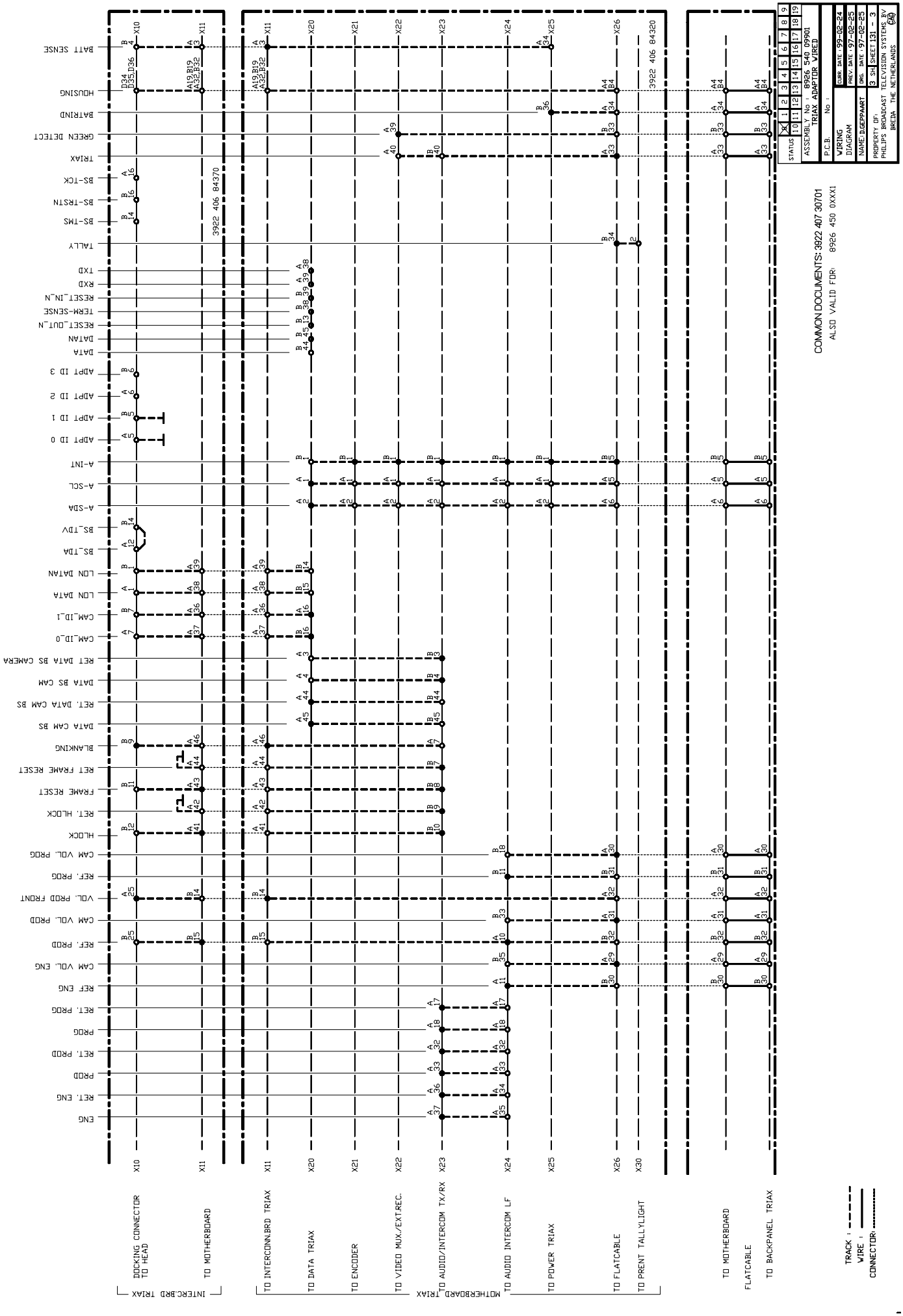
Section 5

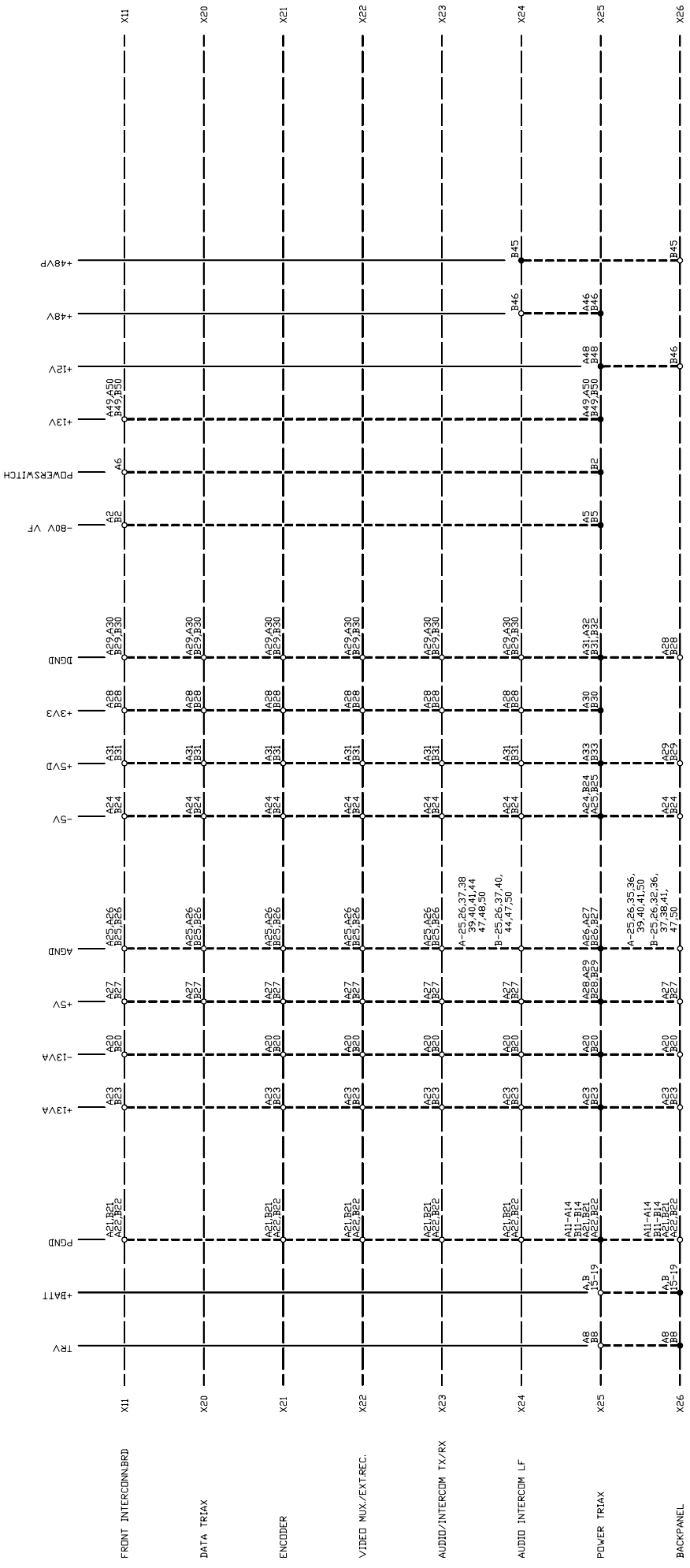
Wiring Diagrams

Contents


INTERC.BRD TRIAX
DOCKING CONNECTOR TO HEAD
TO MOTHERBOARD
MOTHERBOARD TRIAX
TO INTERCONN.BRD TRIAX
TO DATA TRIAX
TO ENCODER
TO VIDEO MUX./EXT.REC.
TO AUDIO/INTERCOM TX/RX
TO AUDIO INTERCOM LF
TO POWER TRIAX
TO FLATCABLE
TO PRENT TALLYLIGHT
TO MOTHERBOARD
FLATCABLE
TO BACKPANEL TRIAX
TRACK :
WIRE :
CONNECTOR:
COMMON DOCUMENTS: 3922 407 30701
ALSO VALID FOR: 8926 540 0XXX1
ASSEMBLY No 8926 540 09901
TRIAX ADAPTOR WIRED
P.C.B. No :
WIRING DIAGRAM
CORR. DATE : 99-02-24
PREV. DATE : 97-02-25
NAME: DIEPPHART
DRS. DATE : 97-02-25
PROPERTY OF: PHILIPS BROADCAST TELEVISION SYSTEMS B.V. BREDA THE NETHERLANDS
SHEET 131 - 1
3922 406 84370
3922 406 84320


COMMON DOCUMENTS: 3922 407 30701
ALSO VALID FOR: 8926 540 0XXX1
TO BACKPANEL TRIAX
ASSEMBLY No : 8926 540 09901
TRIAX ADAPTOR WIRED
WIRING DIAGRAM
PHILIPS BROADCAST TELEVISION SYSTEMS BV
BREDA THE NETHERLANDS
DOCKING CONNECTOR TO HEAD
TO MOTHERBOARD
INTERC.BRD TRIAX
TO INTERCONN.BRD TRIAX
TO DATA TRIAX
TO ENCODER
TO VIDEO MUX./EXT.REC.
TO AUDIO/INTERCOM TX/RX
TO AUDIO INTERCOM LF
TO POWER TRIAX
TO FLATCABLE
TO PRENT TALLYLIGHT
MOTHERBOARD TRIAX
TO MOTHERBOARD
FLATCABLE
TO BACKPANEL TRIAX
TRACK :
WIRE :
CONNECTOR:


BATT SENSE
HOUSING
BATRIND
GREEN DETECT
TRIAX
BS-TCK
BS-TRSTN
BS-TMS
TALLY
TXD
RXD
RESET_IN_N
TERM-SENSE
RESET_OUT_N
DATAN
DATA
ADPT ID 3
ADPT ID 2
ADPT ID 1
ADPT ID 0
A-INT
A-SCL
A-SDA
BS_TDV
BS_TDA
LDN DATAN
LDN DATA
CAM_ID_1
CAM_ID_0
RET DATA BS CAMERA
DATA BS CAM
RET. DATA CAM BS
DATA CAM BS
BLANKING
RET FRAME RESET
FRAME RESET
RET. HLOCK
HLOCK
CAM VOL. PROG
REF. PROG
VOL. PROD FRONT
CAM VOL. PROD
REF. PROD
CAM VOL. ENG
REF ENG
RET. PROG
PROG
RET. PROD
PROD
RET. ENG
ENG
3922 406 84370
3922 406 84320
X10
X11
X20
X21
X22
X23
X24
X25
X26
X30
DOCKING CONNECTOR TO HEAD
TO MOTHERBOARD
INTERC.BRD TRIAX
TO INTERCONN.BRD TRIAX
TO DATA TRIAX
TO ENCODER
TO VIDEO MUX./EXT.REC.
TO AUDIO/INTERCOM TX/RX
TO AUDIO INTERCOM LF
TO POWER TRIAX
TO FLATCABLE
TO PRENT TALLYLIGHT
MOTHERBOARD TRIAX
TO MOTHERBOARD
FLATCABLE
TO BACKPANEL TRIAX
TRACK :
WIRE :
CONNECTOR:
COMMON DOCUMENTS: 3922 407 30701
ALSO VALID FOR: 8926 450 0XXX1
STATUS
ASSEMBLY No : 8926 540 09901
TRIAX ADAPTOR WIRED
P.C.B. No :
WIRING DIAGRAM
CORR. DATE : 99-02-24
PREV. DATE : 97-02-25
NAME: DIEPPAART
DRG. DATE : 97-02-25
PROPERTY OF: PHILIPS BROADCAST TELEVISION SYSTEMS B.V. BREDA THE NETHERLANDS
3 SH SHEET 131 - 3



STATUS	1	2	3	4	5	6	7	8	9
	10	11	12	13	14	15	16	17	18	19

ASSEMBLY No : 3922 406 84320
MOTHERBOARD TRIAX

P.C.B. No : 3922 411 84321

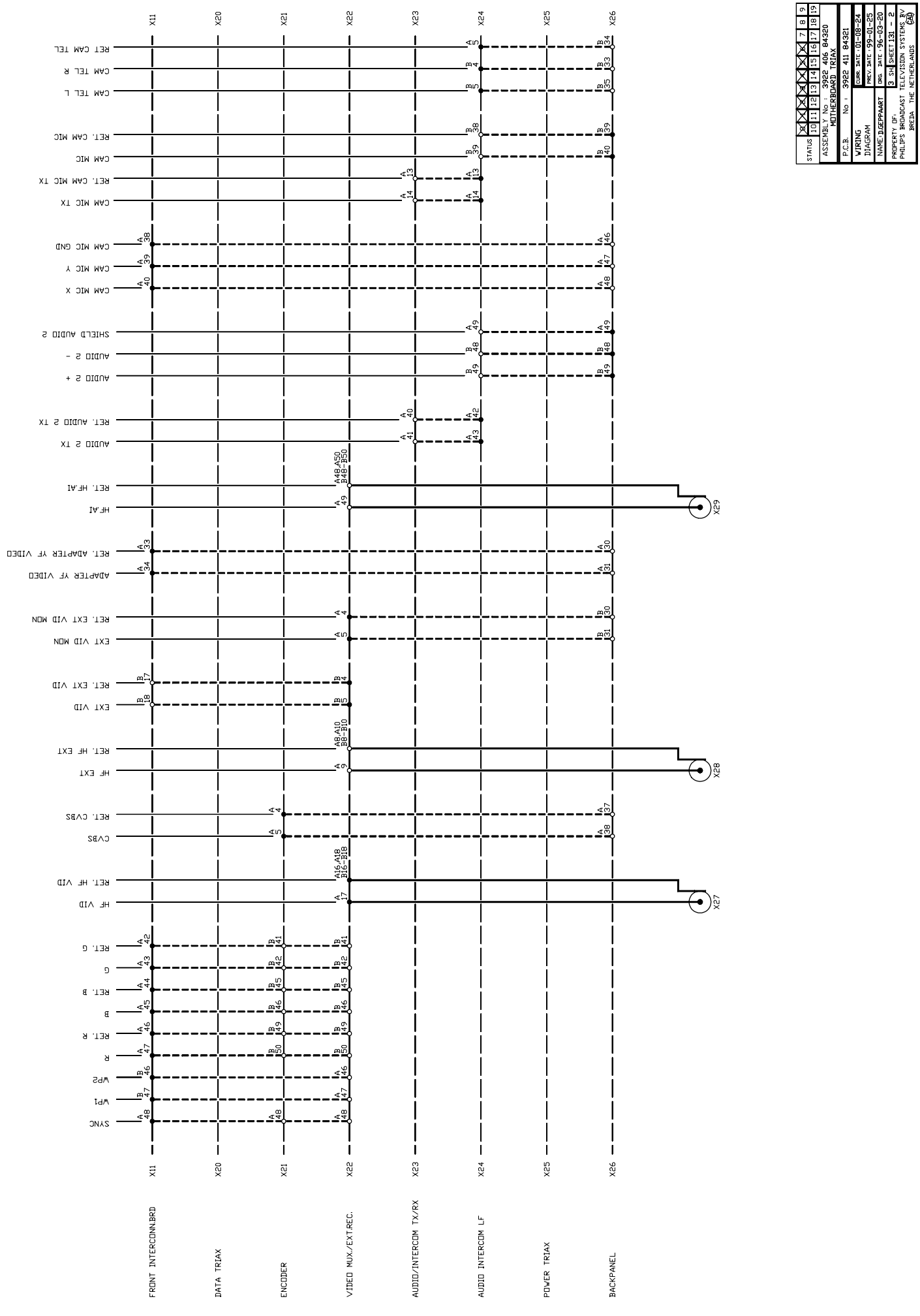
WIRING DIAGRAM — DRWR. DATE : 01-08-24 — PREV. DATE : 99-01-25

NAME: D.GEPPAART — ORG. DATE : 96-03-20

PROPERTY OF: PHILIPS BROADCAST TELEVISION SYSTEMS B.V. BREDA THE NETHERLANDS

3 SH SHEET 131 - 1

CAD



STATUS 10 11 12 13 14 15 16 17 18 19 | 8 | 9

ASSEMBLY No : 3922 406 84320
MOTHERBOARD TRIAX

P.C.B. No : 3922 411 84321

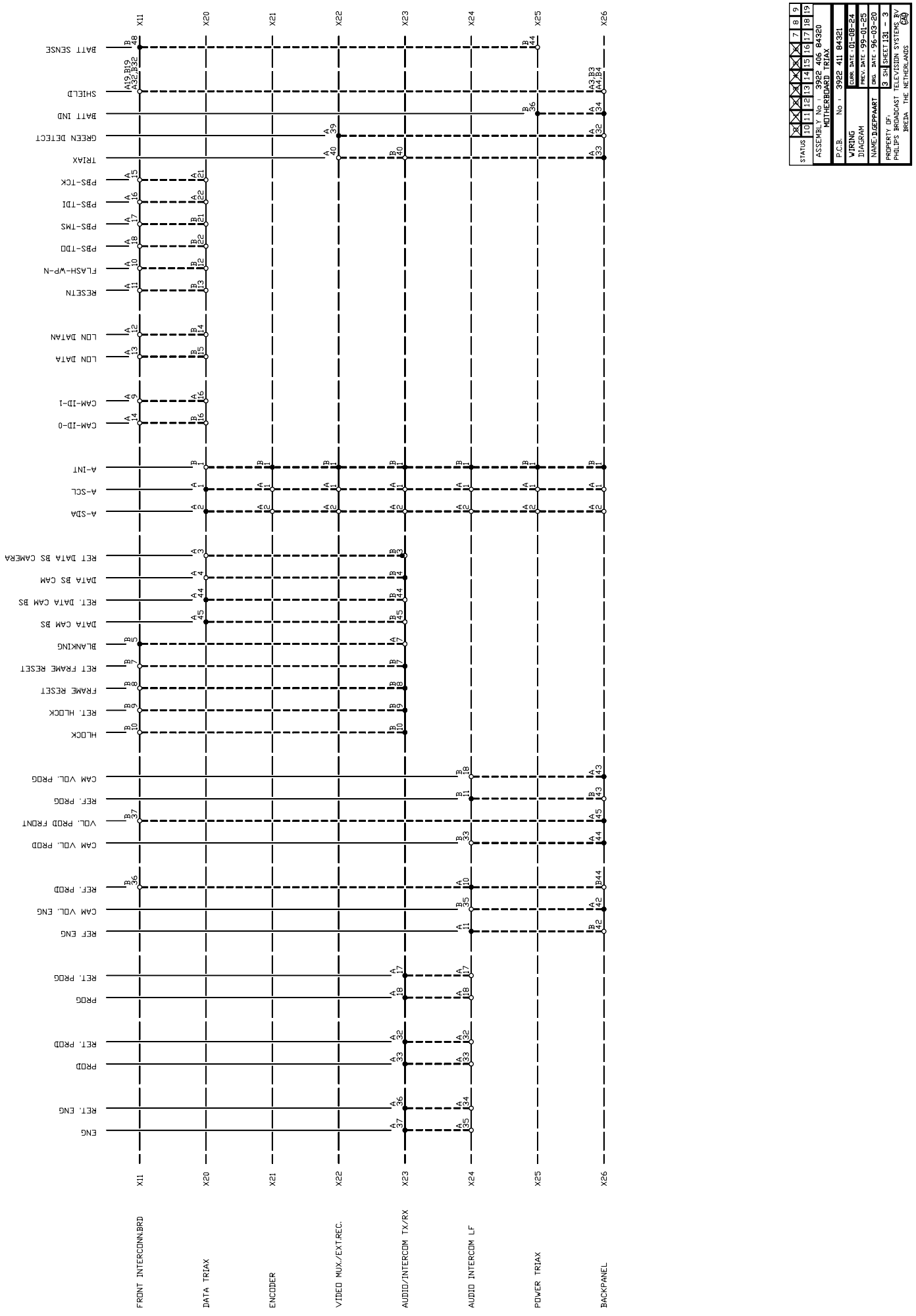
WIRING DIAGRAM

CURR. DATE : 01-08-24
PREV. DATE : 99-01-25

NAME: DJEPPHART
DRG. DATE : 96-03-20

3 SH. SHEET 131 - 2

PROPERTY OF:
PHILIPS BROADCAST TELEVISION SYSTEMS B.V.
BREDA THE NETHERLANDS



STATUS 1 2 3 4 5 6 7 8 9
10 11 12 13 14 15 16 17 18 19

ASSEMBLY No 3922 406 84320
MOTHERBOARD TRIAX

P.C.B. No ' 3922 411 84321

WIRING DIAGRAM

CURR. DATE : 01-08-24
PREV. DATE : 99-01-25
DRG. DATE : 96-03-20

NAME DJEPPAART

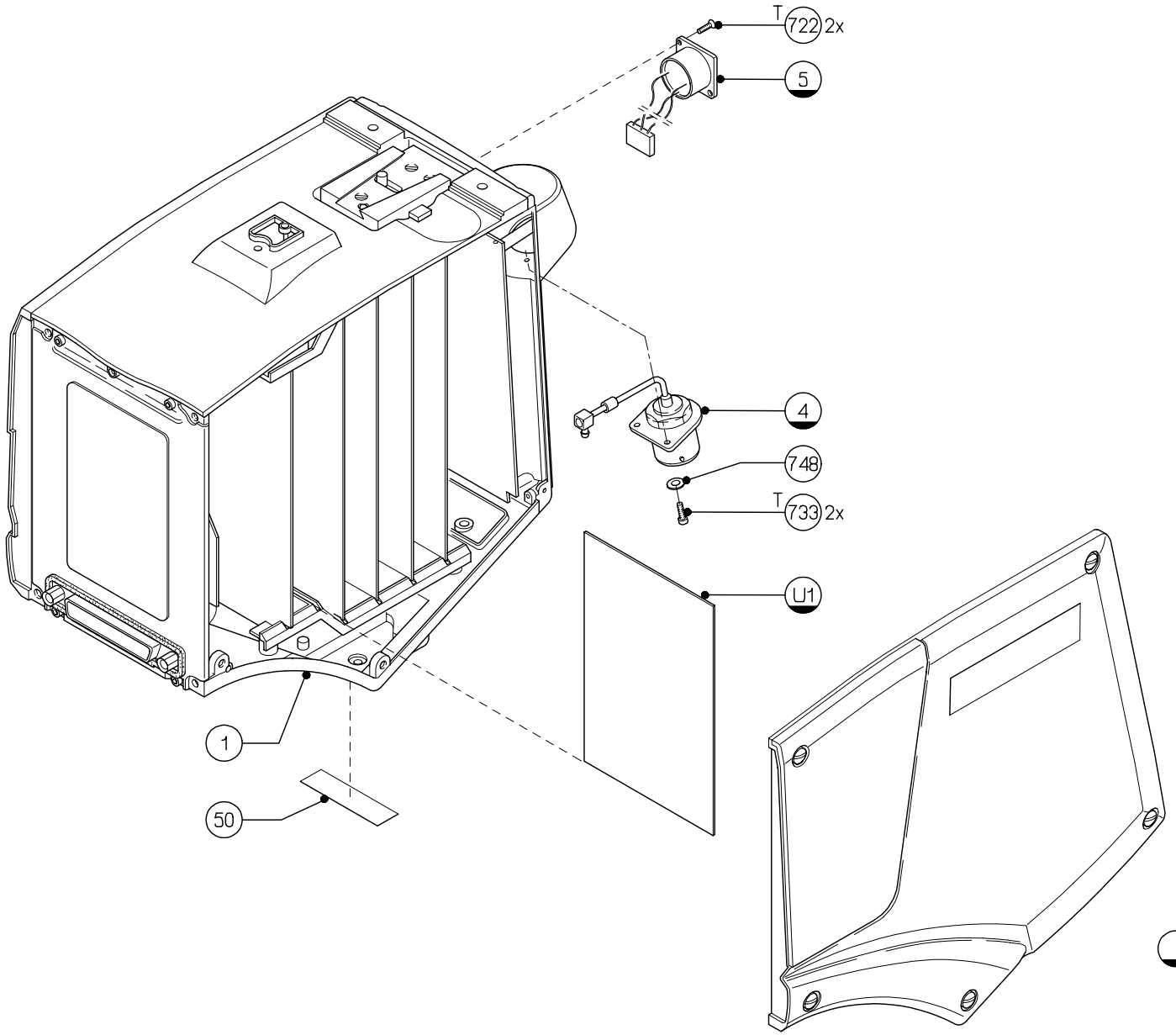
3 SH SHEET 131 - 3

PROPERTY OF:
PHILIPS BROADCAST TELEVISION SYSTEMS BV
BREDA THE NETHERLANDS

Section 6

Mechanical Exploded Views

Contents



OPTION

ALSO VALID FOR: 8926 540 0XXX1

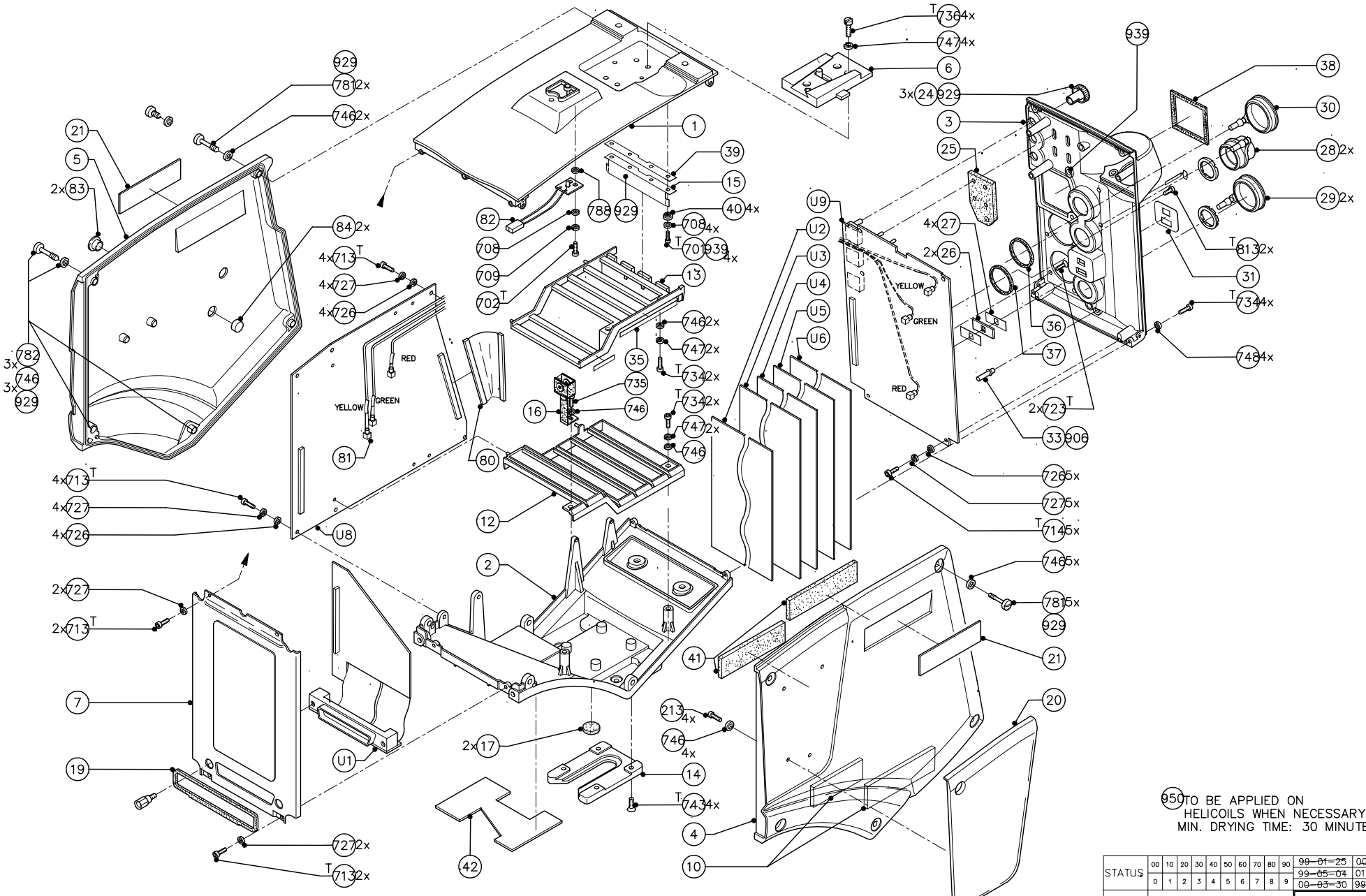
COMMON DOCUMENTS: 3922 407 30701

STATUS	00	10	20	30	40	50	60	70	80	90	99-02-24	
	0	1	2	3	4	5	6	7	8	9		
	TRIAX ADAPTOR										8926 540 09901	

MICROFILM ☐

NAME: Boneschanscher | SUPERS: | 1 SH | SH 110 - 1 | DATE: 97-07-21 | A3

EH | PROPERTY OF: PHILIPS BROADCAST TELEVISION SYSTEMS BV - BREDA - THE NETHERLANDS



STATUS	00	10	20	30	40	50	60	70	80	90	~~99-01-25~~	00-08-11
	0	1	2	3	4	5	6	7	8	9	~~99-05-04~~	01-12-03
											~~00-03-30~~	99-01-07

TRIAX ADAPTOR BASIC — 3922 407 24120

MICROFILM ☐ | NAME: Boneschanscher | SUPERS: | 1 SH | SH 110- 1 | DATE 97-06-03 | A3

EH | PROPERTY OF: THOMSON Multimedia Broadcast Solutions BREDA - THE NETHERLANDS

Section 7

Parts Lists

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
000	TECHNICAL MANUAL LDK5400	s	5322 863 00081
00101W	*WIRING DIAGRAMS LDK5400*		*3922 496 49381*
00201	TRIAX ADAPTOR PAL FIS/XLR	s	8926 540 00001
00202	TRIAX ADAPTER PAL ARD/XLR	s	8926 540 00501
00203	TRIAX ADAPTER PAL LEMO/XLR	s	8926 540 01001
00204	TRIAX ADAPTOR LEMO 3T/XLR5	s	8926 540 01501
00205	TRIAX ADAPTER PAL FIS/TUCH	s	8926 540 02001
00206	TRIAX ADAPTER PAL ARD/TUCH	s	8926 540 02501
00207	TRIAX ADAPTER PAL LEMO/TUCH	s	8926 540 03001
00208	TRIAX ADAPTOR LEMO 3T/TUCHEL	s	8926 540 03501
00209	TRIAX ADAPTOR BBC LEMO/XLR	s	8926 540 04001
00210	TRIAX ADAPTER NTSC TRIL/XLR	s	8926 540 05001
00211	TRIAX ADAPTER NTSC FIS/XLR	s	8926 540 06001
00213	*SET OF ADD.SUPPLIES LDK5400*		*3922 407 27521*
00214	*JIGS & TOOLS LDK100 / 200 SERIES*		*3922 450 04371*
00215	*TRIAX ADAPTOR BASIC*		*3922 407 24121*

products market with "s" are available as spare part,
other parts are printed for information only.

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	FISHER RECEPTACLE WIRED	s	5322 218 11775
5	SAM INTERCONN. XLR5	s	5322 265 11107
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST M2,5X6	s	5322 502 13917
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257
DIAGRWR	*WIRING DIAGRAMS LDK5400*		*3922 496 49381*
JT	*JIGS & TOOLS LDK100 / 200 SERIES*		*3922 450 04371*

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTOR PAL FIS/XLR	ORDERING CODE:	**8926 540 00001**	STATUS:
	REF NR:	**8926 540 00001**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/00

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	ARD RECEPTACLE WIRED	s	5322 218 11776
5	SAM INTERCONN. XLR5	s	5322 265 11107
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST A4 M1,6X4	s	5322 502 14047
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257
DIAGRWR	*WIRING DIAGRAMS LDK5400*		*3922 496 49381*
JT	*JIGS & TOOLS LDK100 / 200 SERIES*		*3922 450 04371*

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTER PAL ARD/XLR	ORDERING CODE:	**8926 540 00501**	STATUS:
	REF NR:	**8926 540 00501**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/05

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	LEMO RECEPTACLE WIRED	s	5322 218 11777
5	SAM INTERCONN. XLR5	s	5322 265 11107
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST M2,5X6	s	5322 502 13917
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257
DIAGRWR	*WIRING DIAGRAMS LDK5400*		*3922 496 49381*
JT	*JIGS & TOOLS LDK100 / 200 SERIES*		*3922 450 04371*

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTER PAL LEMO/XLR	ORDERING CODE:	**8926 540 01001**	STATUS:
	REF NR:	**8926 540 01001**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/10

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	LEMO 3T RECEPTACLE WIRED	s	3922 407 34471
5	SAM INTERCONN. XLR5	s	5322 265 11107
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST M2,5X6	s	5322 502 13917
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTOR LEMO 3T/XLR5	ORDERING CODE:	**8926 540 01501**	STATUS:
	REF NR:	**8926 540 01501**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/15

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	FISHER RECEPTACLE WIRED	s	5322 218 11775
5	SAM INTERCONN.TUCHEL	s	5322 265 11108
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST A4 M1,6X4	s	5322 502 14047
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257
DIAGRWR	*WIRING DIAGRAMS LDK5400*		*3922 496 49381*
JT	*JIGS & TOOLS LDK100 / 200 SERIES*		*3922 450 04371*

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTER PAL FIS/TUCH	ORDERING CODE:	**8926 540 02001**	STATUS:
	REF NR:	**8926 540 02001**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/20

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	ARD RECEPTACLE WIRED	s	5322 218 11776
5	SAM INTERCONN.TUCHEL	s	5322 265 11108
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST A4 M1,6X4	s	5322 502 14047
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257
DIAGRWR	*WIRING DIAGRAMS LDK5400*		*3922 496 49381*
JT	*JIGS & TOOLS LDK100 / 200 SERIES*		*3922 450 04371*

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTER PAL ARD/TUCH	ORDERING CODE:	**8926 540 02501**	STATUS:
	REF NR:	**8926 540 02501**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/25

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	LEMO RECEPTACLE WIRED	s	5322 218 11777
5	SAM INTERCONN.TUCHEL	s	5322 265 11108
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST A4 M1,6X4	s	5322 502 14047
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257
DIAGRWR	*WIRING DIAGRAMS LDK5400*		*3922 496 49381*
JT	*JIGS & TOOLS LDK100 / 200 SERIES*		*3922 450 04371*

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTER PAL LEMO/TUCH	ORDERING CODE:	**8926 540 03001**	STATUS:
	REF NR:	**8926 540 03001**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/30

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	LEMO 3T RECEPTACLE WIRED	s	3922 407 34471
5	SAM INTERCONN.TUCHEL	s	5322 265 11108
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST M2,5X6	s	5322 502 13917
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTOR LEMO 3T/TUCHEL	ORDERING CODE:	**8926 540 03501**	STATUS:
	REF NR:	**8926 540 03501**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/35

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	BBC LEMO RECEPTACLE WIRED	s	5322 218 11774
5	SAM INTERCONN. XLR5	s	5322 265 11107
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST A4 M1,6X4	s	5322 502 14047
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTOR BBC LEMO/XLR	ORDERING CODE:	**8926 540 04001**	STATUS:
	REF NR:	**8926 540 04001**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/40

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	TRILOCK RECEPTACLE WIRED	s	5322 218 11778
5	SAM INTERCONN. XLR5	s	5322 265 11107
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST A4 M1,6X4	s	5322 502 14047
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257
DIAGRWR	*WIRING DIAGRAMS LDK5400*		*3922 496 49381*
JT	*JIGS & TOOLS LDK100 / 200 SERIES*		*3922 450 04371*

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTER NTSC TRIL/XLR	ORDERING CODE:	**8926 540 05001**	STATUS:
	REF NR:	**8926 540 05001**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/50

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	*TRIAX ADAPTOR BASIC*		*3922 407 24121*
4	FISHER RECEPTACLE WIRED	s	5322 218 11775
5	SAM INTERCONN. XLR5	s	5322 265 11107
7	NUT DRIVER FISHER PLUG	s	5322 395 10798
8	NUT DRIVER BNC CONNECTOR	s	5322 395 10799
50	*TYPEPLATE THOMSON CE*		
99	*PACKAGE LDK100 CAM EN TRIAXADP*		
722T	CSK SCR STL ST M2,5X6	s	5322 502 13917
733T	PAN SCR STL ST M3X6	s	5322 502 14403
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257
DIAGRWR	*WIRING DIAGRAMS LDK5400*		*3922 496 49381*
JT	*JIGS & TOOLS LDK100 / 200 SERIES*		*3922 450 04371*

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTER NTSC FIS/XLR	ORDERING CODE:	**8926 540 06001**	STATUS:
	REF NR:	**8926 540 06001**	DATE: **2001-12-05**
			SHEET: **1** OF **1**

alt. code: LDK5400/60

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	OPERATOR'S MANUAL LDK5400	s	5322 863 00079
2	TECHNICAL MANUAL LDK5400	s	5322 863 00081
2D	SERVICE MANUAL LDK5400	s	3922 496 46801
3	*SET CAMERACIPHERS MIDDLE*		
4	BAG PE 250X410X0,03	s	5322 600 10768

products market with "s" are available as spare part,
other parts are printed for information only.

SET OF ADD.SUPPLIES LDK5400	ORDERING CODE:	**not a spare part**	STATUS:
	REF NR:	**3922 407 27521**	DATE: **1999-06-23**
			SHEET: **1** OF **1**

SERVICE PARTS LIST			
Item	*Description*		*Code Number*
1	PCB EXTENDER SMALL	s	5322 466 11795
2	EXTENDER LARGE	s	5322 466 11796
3	MECHANICAL FRONT EXTENDER	s	5322 402 10927
4	*TRIPOD ADAPTER PLATE LDK5031*		*8926 503 10001*
45B	HELICOL M3-1D	s	5322 417 11369

products market with "s" are available as spare part,
other parts are printed for information only.

JIGS & TOOLS LDK100 / 200 SERIES	ORDERING CODE:	**not a spare part**	STATUS:
	REF NR:	**3922 450 04371**	DATE: **2001-02-09**
			SHEET: **1** OF **1**

SERVICE PARTS LIST

Item	Description		Code Number
1	TOPPLATE TRIAX	s	5322 442 01136
2	BOTTOMPLATE MACHINED AND LACQ	s	5322 442 01137
3	BACKPLATE MACHINED AND LACQUE	s	5322 426 10543
4	COVER LEFT	s	5322 426 10544
5	COVER RIGHT MACHINED AND LACQ	s	5322 426 10545
6	QUICK MOUNT BLOCK ASSY	s	5322 466 11712
7	DOCKPLATE ADAPTOR	s	5322 466 11713
10	*CELRUBBER ZK/CR FEST 10X4MM*		
12	PRINTRAIL BOTTOM	s	3922 400 08594
13	PRINTRAIL TOP	s	5322 463 11162
14	V BRACKET LONG	s	5322 402 10879
15	COOLING BRACKET	s	5322 255 10391
16	INTERCONN.FLEX BRACKET	s	3922 407 32931
17	FOOT	s	5322 462 10994
19	SEALING DOCKPLATE	s	5322 466 11714
20	PADDING TRIAX-ADAPTOR	s	5322 466 11715
21	WORDMARK 62MM	s	5322 454 13247
24	LONG KNOB	s	5322 410 11459
25	GASKET 5-FOLD	s	5322 466 11716
26	GASKET FOR SLIDESWITCH	s	5322 466 11717
27	SHEET FOR SLIDESWITCH	s	5322 466 11718
28	DUSTCOVER BNC	s	5322 462 10995
29	DUSTCOVER FISCHER/XLR3-M	s	5322 462 10996
30	DUSTCOVER XLR3 FEMALE	s	5322 462 10997
31	*TEXTSTICKER ON BACKPANEL*		
33	POWER-ON LENS	s	5322 381 11926
35	*LABEL PRINTRAIL*		
36	GASKET XLR3	s	5322 466 11719
37	GASKET XLR4	s	5322 466 11721
38	GASKET HEADSET	s	5322 466 11722
39	ISOLATION PLATE	s	5322 466 11891
40	ISOLATION BUSH	s	5322 532 12984
41	*CR STRIP 10X2MM SELFADH*		
42	STICKER X130	s	5322 454 13355
80	ASSY FLETCABLE 68P	s	5322 320 12165
81	COAXCABLE ASSY TRIAX ADAPTOR	s	5322 322 10125
82	TALLY LIGHT ASSY	s	5322 320 12166
83	BUSH	s	5322 532 11116
84	CAP	s	5322 462 50289
85	*SET OF ADD.SUPPLIES LDK5400*		*3922 407 27521*
90	SET OF SOFTWARE LDK5400	s	3922 407 25051
93	SERVICE ASSY FLATCABLE 68P	s	5322 320 12165
213	PAN TAP SCR F ST T8 2,9X6,5	s	5322 502 14037
701T	PAN SCR STL ST M2X4	s	5322 502 14492
702T	PAN SCR STL ST M2X6	s	5322 502 14494
708	WASH STL ST 2,2X5	s	5322 532 12139
709	SPR WASH STL ST 2,1X4.4	s	5322 530 84092
713T	PAN SCR STL ST M2,5X6	s	5322 502 21207
714T	PAN SCR STL ST M2,5X8	s	5322 502 21208
723	CSK SCR STL ST M2,5X8	s	5322 502 21201
726	WASH STL ST 2,7X6,5	s	5322 532 12128
727	SPR WASH STL ST 2,6X5,1	s	5322 530 80656
734T	PAN SCR STL ST M3X8	s	5322 502 14405
736T	PAN SCR STL ST M3X12	s	5322 502 21213
743T	CSK SCR STL ST M3X8	s	4822 502 13964
746	WASH STL ST 3,2X7	s	5322 532 12126
747	SPR WASH STL ST 3,1X5,7	s	4822 530 80188
748	EARTH WASH STL ST A4 3,2X6	s	5322 532 12257
781	RSD CH NK SCR STL ST M3X10 RVS	s	5322 502 13956
782	RSD CH NK SCR STL ST M3X12	s	5322 502 13913
788	WASH PF-CP SH 3,2X7	s	2522 600 28017
813	PAN TAP SCR F ST T8 2,9X8	s	5322 502 14044
906	*RUBBER GLUE SYNTHETIC NBR 042*		
929	*GREASE FS 1292*		
939	*SCREW LOCK 222*		
950	*LOCKTITE 480*		
U1	INTERCON BOARD TRIAX	s	5322 214 12524
U2	DATA BOARD	s	5322 214 12525
U3	VIDEO MUX/EXT REC.	s	5322 214 12526
U4	AUDIO INT TX/REC	s	5322 214 12527
U5	AUDIO INTERC LF	s	5322 214 12528
U6	POWER BOARD	s	5322 214 12529
U8	MOTHERBOARD TRIAX	s	5322 214 12531
U9	TRIAX BACKPANEL	s	3922 406 89481

products market with "s" are available as spare part,
other parts are printed for information only.

TRIAX ADAPTOR BASIC	ORDERING CODE:	**not a spare part**	STATUS:
	REF NR:	**3922 407 24121**	DATE: **2001-12-11**
			SHEET: **1** OF **1**