

HRS BULLETIN

2nd Edition December 1985

YET ANOTHER 'FIRST' FOR HRS

**COMPUTERISED
ORDER
TRANSMISSION,
RECEPTION &
INVOICING—
ALL in a FEW SECONDS!**



EPSON HX-20 PORTABLE COMPUTER

Once again, **HRS** sets the pace – proof of our market leadership! Every one of our field sales force of 18 representatives is now equipped with an Epson HX-20 Portable Computer.

Instead of laboriously writing down every line of every order from every Customer, all he need do now is to record the order on his **Epson** whilst it is being given to him. Then, via the Customer's telephone (at no charge to him), the representative transmits that order – straight into the Warehouse in Birmingham for immediate processing.

This is accomplished by coupling the Epson, via a modem, into a Linkline telephone data line which is connected, via an in-house Epson Computer, to the Company's main-frame Computer. Here, the invoice is created and produced on a printer located in the Warehouse. The order is then assembled and packed ready for despatch.

Orders can be transmitted at any time, either when they are received or, if that is not convenient, at any time later.

The Epson's small, built-in printer can be used to produce a hard copy of each order for the Customers' own records. When on-line to headquarters, an indication of the stock position of each item ordered can be obtained.

The Epson is able to receive up to seven messages, which are sent to the representative when he comes on-line to headquarters in Birmingham.

Assuming an average 20-line order; from the moment our representative starts to transmit that order to the moment it is ready for despatch; the total time is under 9 minutes!

And all that adds up to what we at **HRS** call **SERVICE** – with no expense spared!



RECORDING THE ORDER . . .



. . . TRANSMITTING THE ORDER

Current Topics**HRS + FERGUSON****FERGUSON**

Technology you can trust

On 17th June this year an agreement was signed appointing **HRS** as a major Distributor for **Thorn EMI Ferguson**.

As a result of this appointment, we have been fully occupied in building up our stocks of **Ferguson TV** and **Audio/Video Recorder** replacement spares. This operation is nearing completion and we shall shortly be issuing a Supplement to our current Catalogue listing the full range available.

In the meantime, if the spare part you need is not shown in our Catalogue, we may well have it in stock by now – so keep your enquiries coming – on 021 771 2525.

HRS Winter 1985 CATALOGUE

The latest edition of the **HRS** Catalogue, which runs to 288 pages, was published during November.

Inevitably, due to the time involved in preparation and printing, this issue is not as up-to-date as we would have wished. A great number of new products were arriving in the last weeks before the Catalogue went to press.

Some of these new items are included, but some-notably the **Ferguson Video** spares in particular-are not all shown. All the items which missed the Catalogue will be covered in a Supplement to be issued in the early part of next year.

**HEADQUARTERS EXPANSION**

When these premises were designed, and the move to them was made only two years ago, there was, at that time, spare office accommodation which had been earmarked for future expansion. Since that time there has been not so much an expansion; more of an explosion! The Sales and Buying departments quickly became overcrowded and in urgent need of more space. To satisfy this need (and to the accompaniment of not a little noise, dust and general mayhem generated by the builders) a whole new floor was added to the premises this year. This is now occupied by the combined internal Sales and Tele-Sales teams.

PLANET PRE-PACKED PRODUCTS

In line with Company policy of providing as comprehensive a service as possible to our Customers, the **Planet** brand of pre-packed products has been launched on the market. This range of goods comprises attractively presented, bubble- and blister-packed components for over-the-counter sales in Retail and D-I-Y outlets. The **Planet** product range embraces spares for Domestic appliances such as vacuum cleaners & washing machines; a range of accessories for Audio, Hi-Fi, TV and Video recorder systems together with Aerial, Electrical and Telephone accessories. This range is now appearing in a number of outlets and will give certain other brands of similar products some healthy competition.

A Price List is available for the current **Planet** range. A Catalogue, with colour illustrations, covering an extended range of products is now in course of preparation. This will be published in the early part of next year.

NEW COMPUTER

An investment of almost £120,000 has been made in a new, 3rd generation Computer system. The main features of this system are a 500-Megabyte memory (50 times greater than that of the previous system), the ability to handle several hundred inputs simultaneously, word processing, and the facility to 'talk' to many of our Suppliers – Computer to Computer. Brought on-line on October 1st, the new system is now almost fully operational and is currently driving some 30 VDU's. The previous system gave over seven years of sterling service, but its comparatively restricted memory capacity was unable to cope with the expansion which **HRS** has achieved during that period.

TELEPHONE COMMUNICATIONS

As with the previous Computer, the original switch-board – new when these premises were first occupied only two years ago – did not have the capacity to cope with the ever-increasing demands made upon it. A new **Herald** switch-board of advanced design and capable of serving up to 100 extensions has been installed, together with a further five incoming lines – giving a total of twenty incoming lines.

A Linkline data line is now in operation. It is used solely by our representatives to send, via a modem, the orders recorded on their Epson portable computers.

A modern Telex machine, with data screen, completes our system of international communications.

THE FUTURE

With all the advantages of the improved facilities detailed above, the comparatively new premises with the extra floor space, increased staffing levels and enlarged warehouse space, we have every confidence that we can meet the fore-seeable demands of the next seven years – without any major problems.

Service Hints

Philips K30

Symptoms/Fault:

Excessive EHT and set pulsing loudly.

Remedy:

Replace the main smoothing capacitor.

Philips K30

Symptoms/Fault:

Intermittent shut-down.

Remedy:

The set back cover is earthed by means of a spring contact. If the spring is not making good contact, the earthing of the back can become intermittent - check and adjust spring tension if necessary and ensure contact surfaces are clean.

With the kind permission of THORN EMI FERGUSON, the following information is reproduced from their December 1985 issue of FERGUSON FEEDBACK.

TELEVISION

TX90 CHASSIS - 20" VERSIONS

Line Jitter

To cure line jitter at reduced signal levels. C194 (5n6F) has been replaced in production by two capacitors in series - the second capacitor being called up as C209.

The new value for C194 is 4n7F, the P/No. is C4470-GC415-RBF7 and C209 has a value of 680pF and its P/No. is C3680-GC46-WA09.

C209 is connected at one end to the collector of TR112 and C194 is connected between C209 and chassis.

TX90 RANGE -

18 CHANNEL REMOTE VERSIONS

C908 - PC1139

To eliminate a problem whereby programme numbers are 'skipped' when operating the Programme Step button. C908 will be altered in value in production from 10nF (on some receivers 0.22uF) to 0.1uF (new P/No. C6120-WW263-17CG).

1790 SERIES - MONOCHROME TV

Change of Audio O/P IC Type

The TDA1190P (P/No. 00V3-629) has been superseded in production by the semiconductor manufacturer.

It is replaced by the TDA3190P - P/No. 00V3-791 - which is a pin-compatible alternative. The two types are completely interchangeable in the 1790 chassis and depending on existing stocks, either type will be sent against orders for IC3.

VIDEO

VIDEOSTAR - MODEL 3V42

'Inop' Function switches

In some cases it may be found that on actuating a function switch (play, rewind, record, etc) the operation may not be initiated.

From S/No. 179 14912 on, the following changes have been introduced in production to overcome this problem. C1 & C2 are changed in value from 150pF to 100pF (new P/No. 01X0-003-842) and R6 (5k6, new P/No. 01X0-042-266) is added between the junction of C1/CF1 and pin 3 of IC1. All the components to which reference is made are located on the Operation 2 PCB.

NEW PRODUCTS

SANYO Video Recorder Spares

DESCRIPTION	MODEL	SANYO ORIGINAL PART NUMBER	Order Code	Price 1-4	each 5+
CAPSTAN MOTOR	VTC 5150	4-527V-51000	CM5150	£22.25	£21.50
GEAR IDLER ASSEMBLY	FVHP 615	143-0-4904-00900	GIA615	£4.98	£4.75
IDLER ASSEMBLY	VTC 9300	143-0-551T-01400	IDL9300	£0.88	£0.80
LOADING ROLLER	VARIOUS	143-0-661T-03800	LR3800	£0.89	£0.81
MOTOR ASSEMBLY	VARIOUS	4-527T-23501	VM23501	£7.95	£7.26
PINCH ROLLER ASSY.	VARIOUS	143-0-545T-01700	PR1700	£1.75	£1.50
PINCH ROLLER ASSY.	VARIOUS	143-0-545T-01701	PR1701	£6.95	£6.60
REEL DRIVE PULLEY	VTC 5150	143-0-662T-01201	RDP5150	£6.50	£6.15
REEL MOTOR 3.6W	VTC 5150	4-529-V-10800B	RM5150	£7.98	£7.25
STOPPER REEL BASE	VTC 9455	143-2-457T-05900	SRB9455	£0.56	£0.49

SANYO Microwave Oven Spares

DESCRIPTION	MODEL	SANYO ORIGINAL PART NUMBER	Order Code	Price 1-4	each 25+
CHOKE DIELECTRIC	EM 1207 SUK	432-2-1321-06300	MS6300	£2.98	£2.68
COLLAR STIRRER SHAFT	EM 1207 S	432-2-2142-04100	MS4100	£0.95	£0.86
COLLAR STIRRER SHAFT	EM 1207 S	432-2-2214-00700	MS700	£0.95	£0.86
GLASS TRAY	EM 9001 VK	432-2-2121-01100	MS1100	£14.56	£13.23
GLASS TRAY	EM 1207 SUK	432-2-2121-03400	MS3400	£8.80	£8.00
GLASS TRAY/TURNTABLE	EM 2710	432-2-2121-02500	MS2500	£9.98	£9.58
PLASTIC STOPPER	VARIOUS	432-2-2141-00400	MSPS1	£2.34	£2.13
PLASTIC STOPPER	EM 2510	432-2-2141-00401	MSPS2	£0.21	£0.18
STIRRER COVER	EM 1207 SUK	432-2-2142-05280	MS5280	£3.99	£3.66
STIRRER COVER	EM 1410 S	432-2-2142-05600	MS560	£1.95	£1.65
STIRRER COVER	EM 3415	432-0-2140-00901	MS901	£11.44	£10.40
STIRRER COVER	EM 8200 K	432-0-2140-00400	MS400	£9.50	£8.55
STIRRER COVER ASSY.	EM 1800	432-0-2140-00902	MS902	£15.59	£14.18
STIRRER COVER ASSY.	EM 2710 N	432-0-2140-00401	MS401	£8.44	£7.68
STIRRER FAN	EM 1207 S	432-0-2210-03200	MS3200	£2.35	£1.98
STIRRER SHAFT	EM 1207 S	432-2-2215-02180	MS2180	£0.35	£0.29

NEW UHF/VHF Connectors & Adaptors

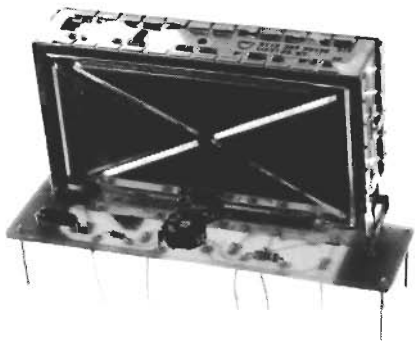
CONNECTORS	Order Code	Price 1-24	each 25+
"BNC" IN-LINE SOCKET, 75 Ohms	BL575	£0.95	£0.86
"BNC" CONNECTOR, FEMALE - FEMALE	BCFF	£1.30	£1.17
"BNC" T - CONNECTOR, ALL FEMALE	BTCF	£2.30	£2.07
"F" PLUG, FOR 5C2V CABLE	FP5C2V	£0.20	£0.18
"F" PLUG, FOR RG58U CABLE	FP58	£0.20	£0.18
"F" PLUG, FOR RG58U CABLE, PUSH FIT	FP58P	£0.20	£0.18
"F" PLUG, FOR RG59U CABLE	FP59	£0.20	£0.18
"F" PLUG, FOR RG59U CABLE, PUSH FIT	FP59P	£0.20	£0.18
"F" SOCKET, PANEL MOUNTING (SINGLE HOLE)	FSPM	£0.20	£0.18
"F" CONNECTOR, MALE - MALE	FCMM	£0.48	£0.44
"F" CONNECTOR, MALE - FEMALE	FCMF	£0.45	£0.41
"F" CONNECTOR, MALE - FEMALE, R/ANGLED	FCMFA	£0.86	£0.78
"F" CONNECTOR, FEMALE - FEMALE	FCFF	£0.25	£0.23
"N" PLUG, FOR 5C2V CABLE	NP5C2V	£1.40	£1.26
"N" IN-LINE SOCKET	NLS	£1.68	£1.52
"N" SOCKET, CHASSIS MOUNTING	NSCM	£1.80	£1.62
"N" SOCKET, PANEL MOUNTING	NSPM	£1.35	£1.22
"N" CONNECTOR, MALE - MALE	NCMM	£2.48	£2.24
"N" CONNECTOR, MALE - FEMALE, R/ANGLED	NCMFA	£3.40	£3.06
"N" CONNECTOR, FEMALE - FEMALE	NCF	£1.98	£1.79
"N" T - CONNECTOR, FEMALE - MALE - FEMALE	NTCFMF	£3.80	£3.42
"N" T - CONNECTOR, ALL FEMALE	NTCF	£3.70	£3.33
"UHF" PLUG (PL259 type) WITH REDUCER INC.	UPL2	£0.45	£0.41
"UHF" T - CONNECTOR, FEMALE - MALE - FEMALE	UTCFMF	£1.10	£0.99
"UHF" T - CONNECTOR, ALL FEMALE	UTCF	£1.10	£0.99

ADAPTORS

"BNC" PLUG TO "F" PLUG	ADBPFP	£0.96	£0.87
"BNC" PLUG TO "F" SOCKET	ADBPFS	£0.75	£0.68
"BNC" PLUG TO "N" PLUG	ADBPNP	£2.20	£1.98
"BNC" PLUG TO "N" SOCKET	ADBPNS	£2.66	£2.40
"BNC" PLUG TO "UHF" PLUG	ADBPUP	£1.25	£1.13
"BNC" SOCKET TO "F" PLUG	ADBSFP	£0.96	£0.87
"BNC" SOCKET TO "N" PLUG	ADBSNP	£2.44	£2.20
"BNC" SOCKET TO "N" SOCKET	ADBSNS	£2.66	£2.40
"UHF" PLUG TO "F" PLUG	ADUPFP	£0.96	£0.87
"UHF" PLUG TO "F" SOCKET	ADUPFS	£0.65	£0.59
"UHF" PLUG TO "N" PLUG	ADUPNP	£2.46	£2.24
"UHF" PLUG TO "N" SOCKET	ADUPNS	£2.46	£2.22
"UHF" SOCKET TO "F" PLUG	ADUSFP	£1.25	£1.13
"UHF" SOCKET TO "F" SOCKET	ADUSFS	£0.75	£0.68
"UHF" SOCKET TO "N" PLUG	ADUSNP	£2.36	£2.13
"UHF" SOCKET TO "N" SOCKET	ADUSNS	£2.65	£2.39

. . . more New Products

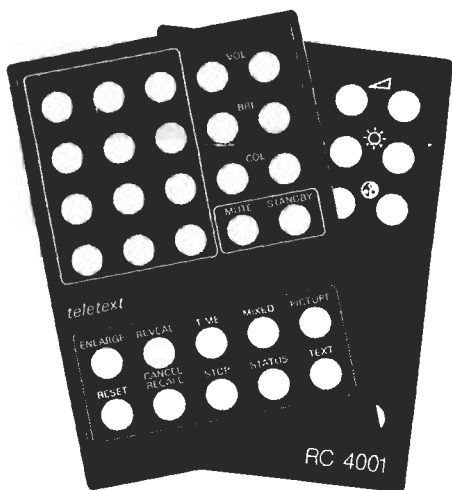
ELC - 1043/05 Replacement



The TV Tuner type ELC-1043/05 is no longer available from Mullard. Consequently, the R & D team at **HRS** has developed a direct replacement for this tuner. This unit is based on the latest Mullard tuner. Employing the latest technology, this results in both increased gain and improved overall performance. A separate gain control is incorporated in the new unit which is available from stock.

Order Code **TTN4305H**
Price, each **£6.95**

Remote Control Panels



Remote Control Panels for the Philips K30 and KT3 chassis. Two versions of these panels are available; one for models with Teletext, one for models without Teletext.

Order Code (with Teletext): **RCTP30T**
Order Code (without Teletext): **RCTP30**
Price, each **£1.50**

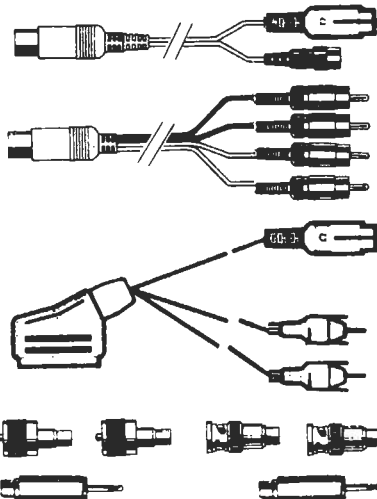
Focus Control



This is a 33 Megohm focus potentiometer in a housing which is designed to clip onto the cases of a wide variety of triplers.

Order Code **FP33M**
Price, each **£0.65**

Video/Audio Dubbing Kit



This Kit is supplied in a plastic, see-through wallet with zip closure. The kit comprises:

3 LEADS:

- a) **DIN plug, 6-pin, 240deg.** to:
 DIN socket, 5-pin, 180deg.
 Phono socket.
 Length, 1.2 metres
- b) **DIN socket, 5-pin, 180deg.** to:
 4 Phono plugs, white, yellow, red & black
 Length, 28cms.
- c) **Euroconnector plug** to:
 DIN plug, 5-pin, 180deg.
 2 x Phono plugs, red & black.
 Length, 1.2 metres

6 ADAPTORS (2 of each 3 types)

- Phono socket** to:
- a) BNC plug
 - b) Jack plug, mono, 2.5mm
 - c) UHF plug, PL259 type

Order Code **CL103**
Price, each **£7.50**

SONY Video spares

IDLER replacement set



SONY Part No. A-6706-348-B
 This Idler set fits model(s):
 SL-J1

Order Code **IRS348B**
Price, each 1-4 **£4.50** 5+ **£4.05**

IDLER and PULLEY set



SONY Part No. A-6706-391-B
 This Idler and Pulley set fits models:
 SL-229, VR-8500, VR8505TXP,
 VR-8900W and VR-8910PT

Order Code **IPS391B**
Price, each 1-4 **£3.15** 5+ **£2.85**

DIN Series Connectors

The DIN Series of connectors stocked by **HRS** has been extended to include those types now being used in new equipment. The full range now stocked is listed below. **New Connectors** are shown in bold type.

PLUGS



Plug	Order Code	Price per pk	
		1-4	5+
2-pin	DINP2	£0.35	£0.30
3-pin, 180°	DINP3	£0.65	£0.58
4-pin, 216°	DINP4	£0.75	£0.68
5-pin, 180°	DINP5A	£0.75	£0.68
5-pin, 240°	DINP5B	£0.80	£0.72
5-pin, 360°	DINP5D	£0.85	£0.75
6-pin, 240°	DINP6	£0.90	£0.80
7-pin, 270°	DINP7	£0.95	£0.85
8-pin, 262°	DINP8A*	£0.52*	£0.49*
8-pin, 270°	DINP8*	£0.52*	£0.49*

*supplied singly, price per plug Pack of 5

COUPLERS



Coupler	Order Code	Price per pk	
		1-4	5+
2-pin	DINC2	£0.45	£0.40
3-pin, 180°	DINC3	£1.00	£0.90
4-pin, 216°	DINC4	£1.00	£0.90
5-pin, 180°	DINC5A	£0.95	£0.85
5-pin, 240°	DINC5B	£0.95	£0.85
5-pin, 360°	DINC5D	£1.00	£0.90
6-pin, 240°	DINC6	£1.25	£1.10
7-pin, 270°	DINC7	£1.25	£1.10
8-pin, 262°	DINC8A	£1.40	£1.26
8-pin, 270°	DINC8	£1.40	£1.26

Pack of 5

SOCKETS



Socket	Order Code	Price per pk	
		1-4	5+
2-pin	DINS2	£0.45	£0.40
2-pin, switched	DINS2S	£0.50	£0.45
3-pin, 180°	DINS3	£0.65	£0.58
4-pin, 216°	DINS4	£1.00	£0.90
5-pin, 180°	DINS5A	£0.75	£0.68
5-pin, 180°	DINS5AM*	£0.75	£0.68
5-pin, 240°	DINS5B	£0.75	£0.68
5-pin, 360°	DINS5D	£1.10	£0.95
5-pin, 360°	DINS5DM*	£1.00	£0.90
6-pin, 240°	DINS6	£1.25	£1.10
7-pin, 270°	DINS7	£1.25	£1.10
8-pin, 262°	DINS8A	£1.46	£1.30
8-pin, 270°	DINS8	£1.46	£1.30

*Square, plug-in sockets Pack of 5

Did you know . . . ?

This year, so far, **HRS** has processed over **160,000 ORDERS!**

At this time of the year we are averaging approximately 1,000 orders per day. Every order receives immediate attention, and they are despatched the same day if they are received before 4.00p.m. Most orders are despatched by post - via four Post Office collections per day.