

### 3.2 LOADING THE AZIMUTH TAPE

#### WARNING

The screwdriver may only be inserted into the adjustment screw head with the cassette deck in play position.

Load the Azimuth tape by pressing and holding down the CTRL key and then pressing the small ENTER key, then follow the instructions displayed on screen. The tape will now load. Ensure that the sound is turned up when the counter appears to start counting. Insert the special screwdriver, with pointer mounted as per diagram, into the adjustment hole and gently turn it clockwise until you hear a bleep from the computer. At this point turn the screwdriver slowly anti-clockwise to stop the bleeping and the counter should start counting up to 1000. Should it stop/start, turn the screwdriver slightly more anti-clockwise until it counts up to 1000. Once this has been achieved, note the point at which it happened. It is suggested that you use a matchstick as in the example.

#### 3.3 NEXT STAGE

To start the counter again press the space bar then carry out the same procedure turning the screwdriver slowly anti-clockwise to obtain a bleeping sound. Then bring it back clockwise to obtain the counter reading up to 1000 and make note again using a matchstick.

#### 3.4 FINAL SETTING

The screwdriver should have remained inserted throughout this operation. You will now note the angle between the markers. To obtain the optimum setting you will need to halve the angle between the markers, (note the angle is over 360°), therefore turn the screwdriver clockwise until the back of the pointer is in the centre of the two markers. This will ensure the head is ideally aligned.

NOTE: The angle is the turning distance between the two extremes when the counter was reading 1000, and this could be more than 360°.

#### 3.5 TEST

Turn over the tape and load the test game "CHOPPER SQUAD". This game has been recorded at 2000 baud so if this program loads you should not have any problems with other fast loading programmes. Load "CHOPPER SQUAD" by pressing and holding the CTRL key and then pressing the small ENTER key, and then follow the instructions on screen.

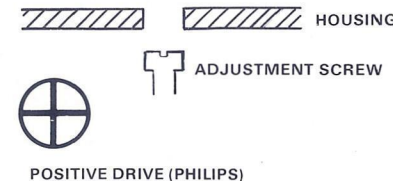
#### 3.6 CASSETTE CARE

Having now carried out this adjustment you will appreciate the tolerance of the alignment and you will keep this tape for future use to minimise the frustration of the past. Keep your Azimuth cassette stored in its box at all times and do not expose it to excessively high or low temperatures. Do not store in a dusty environment.

#### YOUR STEP BY STEP GUIDE THIS IS AN AMSTRAD CASSETTE DECK



### THIS IS THE HOLE FOR THE AZIMUTH ADJUSTMENT.



POSITIVE DRIVE (PHILIPS)

These diagrams show the rotation of the screw to the adjustment hole and the Amstrad housing.

#### SETTING YOUR AZIMUTH

1 Insert the screwdriver into the adjustment hole as shown with the cassette deck in the play position, making sure that the screwdriver sits firmly into the screw head.



3 To start the counter press the space bar. Now rotate the screwdriver anti-clockwise until the counter chimes, then gently clockwise until the counter goes up to 1000 without resetting. You now have the other extreme. Now mark the position with another matchstick.



2 First rotate the screwdriver clockwise until the counter reset chimes. Then gently turn the screw anti-clockwise until the counter goes up to 1000 without resetting. This is one of the extremes within the tolerance. Mark this position with a match stick as shown. Do not remove the screwdriver and keep the pointer facing this position.



4 Now divide the angle between the two extremes remembering which direction the extremes are in e.g.



FIRST ANGLE SECOND ANGLE NOW HALVE THE ANGLE  
1ST EXTREME 2ND EXTREME 1ST EXTREME 2ND EXTREME 1ST EXTREME



THE ANGLE TO BE HALVED  
MAY BE UP TO 360°

NOTE: These diagrams are only for guidance as the actual angles and the position of the screwdriver pointer at the start of the operation will vary from one cassette deck to another. However it is important you halve the two extremes in the right direction when turning the screwdriver pointer for the final optimum setting.

Now if the sequence has been carried out correctly your head should be aligned to the accuracy of 2000 baud which should handle all commercially available cassette programs. To check this you should flip the cassette over and load the 'B' side, which is a free test game recorded at 2000 baud. If you experience loading problems you should clean the tape heads or carry out the alignment process again in case of an error on your first attempt.

#### CHOPPER SQUAD

##### LOADING

Press CTRL and small ENTER.

##### THE SCENE

The year is 1994. The world has been taken over by the 'orrible aliens. Only one small part remains unconquered - England! You play the role of Macho, an ace helicopter pilot. Your task? To assemble the parts of your nine fighter planes, the only hope Earth has left.....

##### PLAYING

On the screen there are three helicopter landing pads. Parts for the planes come down from the top. You have to get a part, take it to the bottom right hand corner, flying from the left. Trying to defeat you are the 'orrible aliens in their craft. Luckily you are equipped with a photon lazer blazer, with rapid repeater fire. The build status of your current plane is at the top of the screen. Once you have assembled one plane, you must go and assemble the next, but there is a problem! The aliens get quicker and start homing in on you until they.....!

##### KEYS

Joystick compatible or Q helicopter lift, P right, O left and space bar fire.

##### Warranty

If you damage the screwdriver then a good hardware shop or a specialist tool centre should be able to supply you with another. If you have any difficulty obtaining a replacement then contact Interceptor Software direct at Mercury House, Calleva Park, Aldermaston, Berks.

All rights of the producer and the owner of the work being produced, are reserved. Unauthorised copying, hiring, lending, public performance and broadcasting of this program is prohibited. The publisher assumes no responsibility for errors, or liability for damage arising from its use.



# Azimuth Head Alignment Tape

Have you ever purchased a faulty computer program? Or own a program that appears to load on your system but not on a friend's? The single most common reason for loading problems from tape, is the tape head alignment on the cassette deck. This package is designed to let the Amstrad owner re-align the tape head on his or her tape deck simply and quickly. No technical skills or knowledge of complicated electronics are required and the total operation and test can be carried out within minutes.

A Step by Step picture guide means that the user simply mimics the illustrated procedure for perfect results first time round. All the software and necessary tools are included to make a complete re-usable package which will remedy those bad loading problems time and time again. A quality arcade game (Chopper Squad) has been recorded on the reverse side for you to test your Azimuth and also play.

The Package Includes:

- 1 AZIMUTH 2000 HEAD ALIGNMENT TAPE/TEST GAME "CHOPPER SQUAD"
- 1 INSTRUCTION MANUAL
- 1 SPECIAL SCREWDRIVER
- 1 POINTER

WRITTEN BY DAVID M. BANNER  
CHOPPER SQUAD TEST TAPE WRITTEN BY STEPHEN CURTIS  
PRODUCED BY RICHARD PAUL JONES

## WARNING

Although the majority of loading problems are due to the Azimuth setting, which can be rectified with this alignment tape. Other problems may be due to the tape mechanism hence the guarantee should be exercised as tampering with it MAY invalidate the guarantee.

All rights of the producer, and of the owner of the work being produced, are reserved. Unauthorised copying, hiring, lending, public performance and broadcasting of this cassette is prohibited. The publisher assumes no responsibility for errors, nor liability for damage arising from its use.

**INTERCEPTOR  
MICRO'S**

Mercury House, Calleva Park,  
Aldermaston, Berks.

INTERCEPTOR  
MICRO'S  
Azimuth Head Alignment Tape  
CPC 464, 664, 6128  
AMSTRAD  
© 1985

**INTERCEPTOR  
SOFTWARE**

# Azimuth Head Alignment Tape

SUITABLE FOR THE AMSTRAD CPC 464  
AND 664, 6128 IN TAPE DECK MODE



**AMSTRAD**

## INTRODUCTION

### 1.1 LOADING PROBLEMS

With the influx of large memory software on the market today and with most software houses developing their fast loaders, program loading reliability suffers. This is due to the loading systems increasing the baud rate in which the program is put onto the tape. This in itself calls for a much more critical setting of the tape head on the cassette deck.

### 1.2 HAVE YOU EVER RETURNED A FAULTY TAPE?

Many owners who return tapes to retailers are in fact returning perfectly good recordings. The problems lie with the tape recorder. The common answer by many is "Well all my other tapes work". This may be so, but from experience, as you will see when you set up your alignment, the tolerance can be more than a 360° turn of the adjustment screw to obtain a "Possible load setting". This package is designed for you to carry out this adjustment yourself and is explained stage by stage. Once you have carried it out you will realise the simplicity of the operation and will be able to use the package when required.

### 2.1 WHAT IS THE AZIMUTH ANGLE?

A tape head basically consists of two magnetic poles with a gap between them. The gap should ideally be perfectly perpendicular to the direction of tape travel. The difference between this gap and the perpendicular is called the Azimuth angle.

### 2.2 WHY SHOULD WE SET THIS ANGLE CORRECTLY?

If a magnetic pulse on the tape goes past a perfectly aligned head, then the electrical signal received from the head is very clear to the computer and the program will load without error. If the head is slightly unadjusted (out of alignment), the signal received from the head is not clear and appears "smudged" over a longer time interval. The computer will be unsure as to exactly when the signal occurred and so timing errors will be introduced. This can result in data being read incorrectly from the cassette (loading errors). If the head is a long way out, pulses may appear "smudged" together and data will be lost (the program will never be recognised, the tape will appear blank, but it is not). Both these problems are more critical at a high speed rather than at low speed and a tape recorder that normally copes with loading programs at the Amstrad speed of 1000 baud (speed write 0) may have difficulty with programs saved at 2000 baud (speed write).

### 2.3 WHY SHOULD I USE THIS TAPE?

The Azimuth angle varies by a small amount from tape to tape due to differences in cassette casing. This cassette is designed to be as accurate as possible in this respect and will be only slightly different from other good quality tapes. It has been professionally recorded to the very highest standard. Imitations or copies will not give the same result.

### 2.4 THE AZIMUTH ALIGNMENT TAPE

This special tape has a standard baud rate loader, but its special feature is a counter 0-1000 written at 2000 baud rate, which is continued on the alignment side of the tape. On the reverse is a game called "CHOPPER SQUAD" which will act as a test to see if you have carried out the adjustment correctly.

### 3.1 CLEANING THE HEAD PRIOR TO ADJUSTMENT

Before carrying out the adjustment, one should ensure that the head is cleaned. This is best done with the use of a cotton bud and Isopropyl Alcohol (available from any good chemist). This is best done with the tape recorder's play button depressed, consequently revealing the tape head.

At this point identify the screw to be adjusted with the play button depressed. The adjusting screw on the head is aligned with the adjustment aperture in the casing.

