

e n t r y   s e r i e s



u s e r   m a n u a l



# e n t r y

**Welcome. In selecting ATC you have chosen an example of the finest audio engineering available. ATC was founded on a principle of engineering excellence, and that principle still defines our products today. Given the right opportunities, ATC products will deliver exceptional audio performance, but the opportunities will only arise from careful and thoughtful installation and use. Please read the following manual fully. It will help you understand the product and to realise its full potential. We are happy to answer questions and offer advice on any issues that arise through installation or use of ATC products.**

**Contact details can be found at the back of this manual.**

ATC was founded in London in 1974 by Australian émigré Bill Woodman, who still heads the company today. An enthusiastic pianist and engineer he was naturally drawn to loudspeaker design and, after a period working at Goodmans (where many of the names that went on to found British loudspeaker companies began their careers), he struck out on his own. The premise on which ATC began is a simple one – and one that, in many respects, is still true today: hi-fi loudspeakers tend to be detailed and accurate, but of limited dynamic range, while professional monitor speakers tend to express the opposite character. ATC products were designed from the outset to offer the best of both. It's an easy concept to describe, but surprisingly difficult to engineer. The difficulty inherent in designing such loudspeakers is one of scale. Hi-fi levels of accuracy and detail call for lightweight moving parts and delicate engineering. Professional monitor levels of performance, however, demand far

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more robust components engineered to survive the rigours of high level use for extended periods.

The only way to combine the two is through precision engineering of a class and scale more often associated with aerospace or motorsport. But the results are worth the effort and the cost. ATC loudspeakers, with their unique in-house designed drivers, combine the best of hi-fi and professional to devastating effect.

ATC has become synonymous with active systems. Choosing to offer active loudspeakers (where the passive systems still have their place, and ATC engineering skills can still bring remarkable results from them) is a fundamentally better solution to the problems posed by accurate, high level music reproduction.

The ATC instinct is always for the better solution. Not cheaper, not quicker, but better.

It was the development of active loudspeakers that first brought ATC into electronics design and engineering.

Active speakers demand multiple power amplifiers, so ATC from the mid 1980s became not just a loudspeaker manufacturing company but an electronics manufacturer, too. The further step from electronics for active speakers to a range of stand-alone amplifier products was natural and now means that ATC engineering is available from the recording desk or CD player output to the ears.

From modest beginnings ATC has grown to become one of the very few manufacturers successful across both domestic and professional audio. By selecting ATC you join a group of music lovers, professional audio engineers, studios and musicians across the world that understand and value the engineering that goes into an ATC product.

## Safety Warnings

1. Read instructions – all the safety and operating instructions should be read before the appliance is operated.
2. Retain these instructions – the safety and operating instructions should be retained for future reference.
3. Heed warnings – all warnings on the appliance and in the operating instructions should be adhered to.
4. Follow instructions – all operating and other instructions should be followed.
5. Water and moisture - the appliance should not be exposed to dripping or splashing and no objects such as vases, should be placed on the appliance.
6. Ventilation - a minimum of 80mm is required at the rear of appliances to ensure sufficient ventilation. The ventilation should not be impeded by covering the appliance with items such as table-cloths, curtains etc. Further, the appliance should not be built into an installation, such as a bookcase or cabinet, that may impede the flow of air around the appliance.
7. Heat – the appliance should be situated away from heat sources such as radiators, stoves or other appliances that produce heat.
8. Power sources - The appliance is of Class I construction and shall be connected to a MAINS socket outlet with a protective earthing connection.
9. Power cord protection – power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles and the point where they exit the appliance.
10. Cleaning – the appliance should be cleaned only as recommended by the manufacturer.
11. Unattended periods – the power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
12. Object entry – care should be taken so that objects do not fall into the appliance.

## Unpacking & Handling

1. Open the carton and remove all loose items.
2. Fold back both the inner and outer carton flaps and carefully roll over the carton so that the loudspeaker and all strato-cell caps remain in the carton.
3. Lift away the cardboard carton leaving the loudspeaker cradled in the strato-cell caps.
4. Remove the upper half of the end caps and lift the loudspeaker away from the packaging.
5. Remove the felt bag and position the loudspeaker in the listening room.
13. Damage requiring service – the appliance should be serviced by qualified service personnel when:
  - i. the power supply cord or the plug has been damaged
  - ii. objects have fallen or liquid has been spilled into the appliance
  - iii. the appliance has been exposed to rain or other serious liquid exposure
  - iv. the appliance does not appear to operate normally or exhibits a marked change in performance
  - v. the appliance has been dropped or the cabinet damaged
14. Servicing – the user should not attempt to service the appliance beyond those measures described in the operating instructions. All other servicing should be referred to qualified service personnel.
15. Grounding or polarisation – precautions should be taken so that grounding or polarisation means for the appliance are not defeated.
16. The Mains disconnection switch is located on the rear panel. Pressing the switch downwards will turn the unit on. The unit can be turned off by upward pressure on the switch. Please allow enough room around the unit to ensure the switch is readily operable when the unit is in use.

# Stereo/Satellite Loudspeakers

- 1  
Monitor Placement
- 2  
Amplification (Passive Models)
- 3  
Connection (Passive Models)
- 4  
Connection (Active Models)
- 5  
Operation (Active Models)

## 1 : Monitor Placement

The subjective performance of any monitor loudspeaker will be fundamentally influenced by the acoustic character of the room in which it is used, and its position within the room. Most often monitors are installed in rooms which are comfortable to sit and talk in. A mixture of carpets, curtains and soft furnishings will help ensure that middle and high frequencies are reasonably well controlled. There may however, be low frequency problems; either too much or too little bass. To minimize low frequency problems the monitors should be kept away from corners or walls. Start with them positioned around 1 metre from the side walls and 2 metres from the back. If the balance is bass-light, the monitors can be moved towards the back walls.

For stereo listening, loudspeakers should be positioned so they form an equilateral triangle with the listening position (See **Fig. 1**). Loudspeaker stand height should be chosen to position the loudspeaker acoustic axis at, or close to ear level. (See **Fig. 2**).

All rooms vary and it is a good idea to experiment with both the listening and speaker position until a good compromise is reached. For professional installations the requirements are often very specific. Please consult with an experienced professional acoustician if necessary.

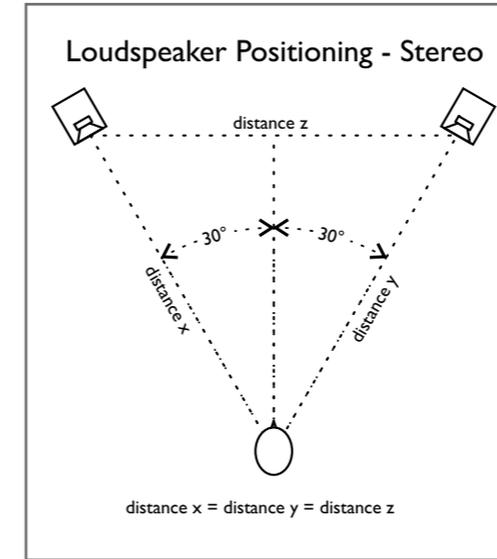


Fig. 1

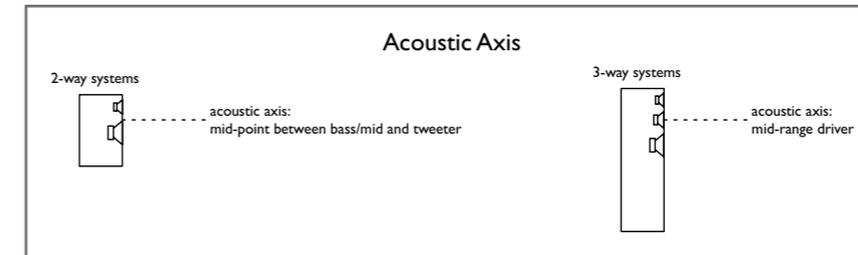


Fig. 2

## 2 : Amplification (Passive Models)

The choice of partnering amplifiers for Passive Entry Series loudspeakers will have significant influences on the performance of the system. Consider the following when selecting the amplifier:

- With any passive loudspeaker there is a trade-off between low frequency extension and sensitivity. Extended low frequency response means that sensitivity is relatively low. It is advisable therefore to select an amplifier of relatively high power capabilities. Use of an under-specified amplifier will result in the system sounding distorted at high level and may risk damage to the loudspeakers. Valve or solid state amplifiers with high output impedance should be auditioned carefully to establish that their characteristic reduced damping at low frequencies is acceptable. Typically, amplifiers with power outputs of 75W+ (continuous output) will give the best results.

- The ATC bass/mid driver voice coils are unusually large and operate in an overhung gap. The result is that the monitors not only demonstrate extremely low distortion at all levels but also a greatly enhanced effective dynamic range. This exceptional distortion performance, also combined with very wide dispersion, will ruthlessly reveal deficiencies in ancillary equipment. It is advisable therefore to audition your speakers with your proposed amplifier and ancillary system. The range of ATC amplifiers and pre-amplifiers should be your first choice.

## 3 : Connection (Passive Models)

ATC Entry Series monitors are equipped with a “bi-” or “tri-wire” connection panel that enables separate amplification of the bass/mid driver and tweeter. Remove the linking bars between the pairs of terminals if you wish to take advantage of this facility.

The pairs of binding posts are laid out to match the drive unit positions with the bass driver pair towards the lower edge of the input panel. Ensure the multiple amplifiers used for bi or tri-amping have equal gain and use the most powerful amplifier for the LF driver. The terminals can accommodate either stripped cable ends or 4mm plugs.

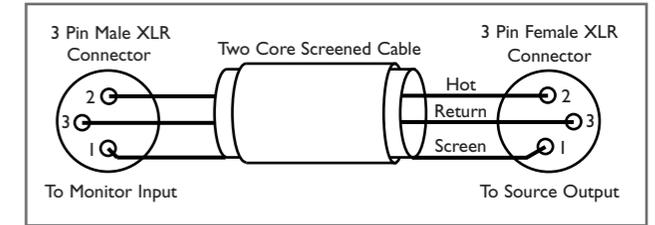
Always use good quality speaker cable with a 2.5mm minimum cross sectional area per conductor (79 strand). Cable of a smaller cross sectional area or fewer strands is unsuitable. For cable runs longer than 5m use a significantly heavier gauge cable. Consult our dealer or consultant for specific cable recommendations. Ensure that the positive and negative terminals on each connection panel are connected back to the corresponding positive and negative terminals on the amplifier.

## 4 : Connection (Active Models)

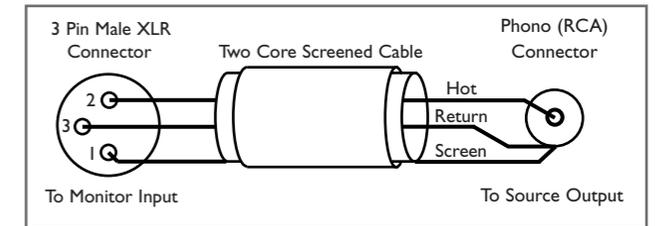
**Signal Cable Options:** Balanced cable configuration is the preferred option, however unbalanced connection is possible.

**Figs 3 and 4** illustrate the signal cable connections required for each option. Balanced (XLR to XLR) connection offers lower noise and better immunity to “hum” pick-up. Unbalanced (XLR to Phono or Two pole Jack) connection carries risk of hum caused by multiple signal earths. Hum problems resulting from unbalanced connection may be reduced by making ONE of the following modifications to the signal cable connections: If the driving preamplifier (or desk) is double insulated (i.e. has no mains earth), disconnect the signal cable screen at the RCA Phono plug end. Alternatively, disconnect the signal cable screen at the XLR end. This second option will make the source the reference signal earth.

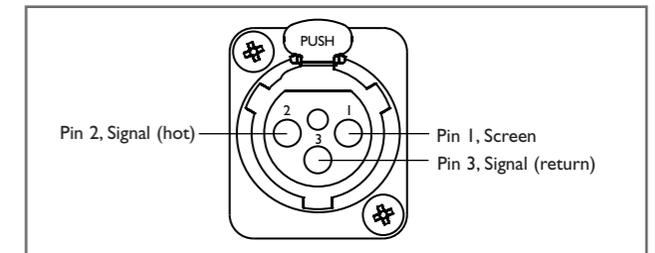
**Connection:** Two connections are required for each monitor: one for mains power and one for the audio signal. The mains supply is supplied specifically to comply with local statutory safety approvals and alternatives should not be substituted. If you intend to use your monitors in an alternative territory, please contact ATC for advice. The mains connection must always be earthed. The signal cable and plug (not necessarily supplied) should be of a good quality and XLR terminated. Poor cable and plug quality will compromise the performance of your monitors. The signal input pin configuration is illustrated in **Fig 5**. Due to the nature of the electronics in ATC active loudspeakers, it is quite normal for a sound to be heard from the speaker when the power is applied or disconnected. The noise heard will not damage the speaker. Although ATC use the highest grade components, a different noise may be heard from each speaker due to slight variations in the amplifier components.



**Fig. 3 Balanced Cable**



**Fig. 4 Unbalanced Cable**



**Fig. 5 Input Connection Pins**

## 5 : Operation (Active Models)

**Figs 6 and 7** illustrate the connection and control panel for the amplifiers used in the active SCM40A and 19A monitors. Each feature is described below:

**Mains Inlet:** The supplied mains power lead (appropriate to the local territory) should be connected here. Ensure that the mains voltage specified on the panel corresponds with the local supply voltage.

**Power Switch:** Switches on the monitor.

**Fuseholder:** Should a monitor fail to switch on when the power switch is operated, the fuse should be inspected. Lift out the fuseholder cover using a flat-blade screwdriver, remove the fuse and inspect it for damage. If required, a replacement should be fitted. It should be stressed however, that fuses often fail because of a serious electrical fault. If this is the case, then simply replacing the fuse will only result in another fuse failure. The monitor should be returned to ATC if a second fuse fails.

**Input Socket:** The audio signal cable should be connected here. Balanced or unbalanced cables may be used (see Section 4.)

**Fault LED:** The fault LED will illuminate if there is a fault in the Amplifier or the heat sink temperature is too high for safety or reliability. There will be no output from the Loudspeaker if the LED is on. Turn the Amplifier off at the mains, remove the Input connector, wait approximately 10 seconds and then turn the Amplifier back on again. If the LED is still on, leave the Amplifier to cool for 30 minutes and repeat the above procedure. If after this time the LED still comes on then contact ATC for advice.

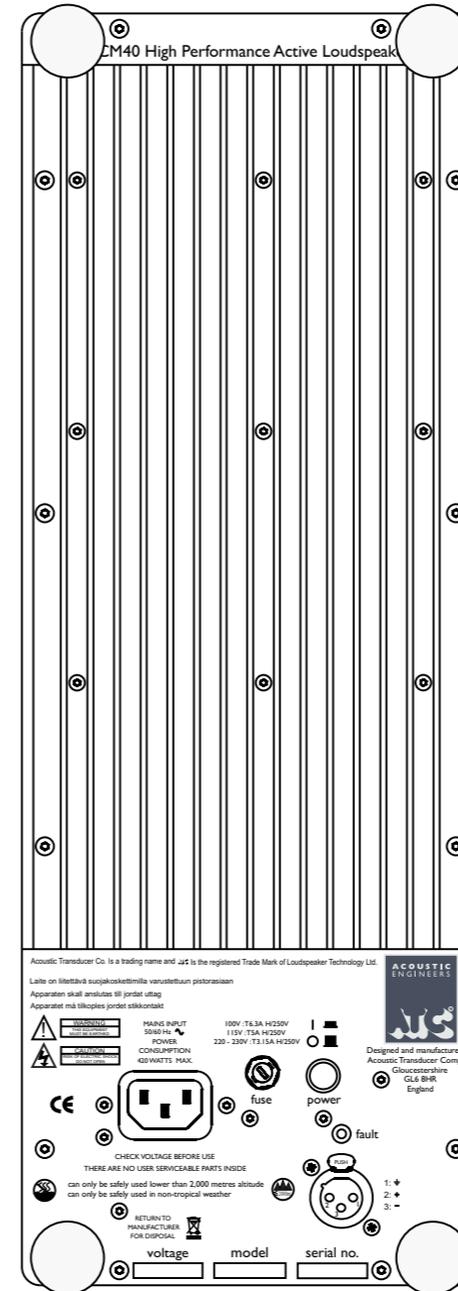


Fig. 6 SCM40A Connection and Control Panel

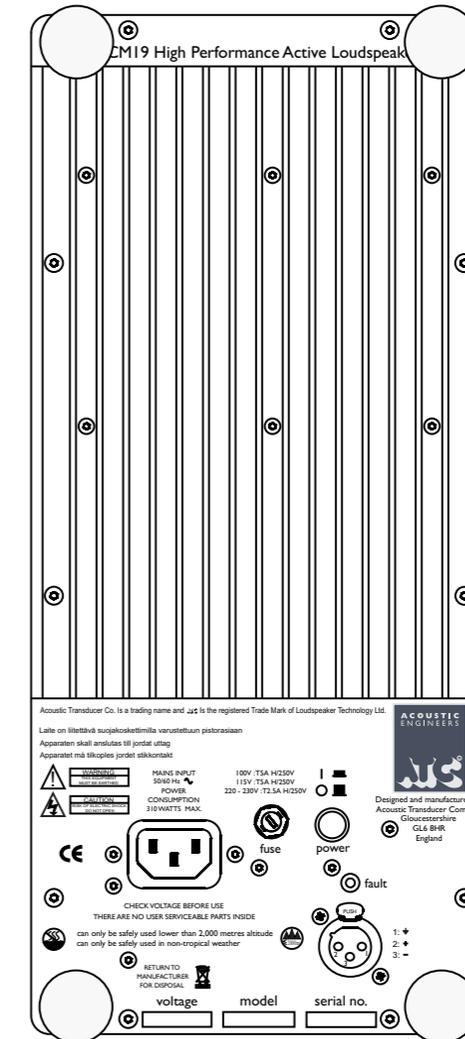


Fig. 7 SCM19A Connection and Control Panel

# Centre/Sub Multichannel Units

1  
Monitor Placement

2  
Bass Management

3  
Amplification

4  
Connection

5  
Functions/Settings – CI Sub

## I : Monitor Placement

### Centre Speaker Placement

The positioning constraints on a centre channel loudspeaker are always influenced by the type and location of the associated screen. However, the basic parameters that influence the subjective performance of any loudspeaker in a listening room – alignment to the listening position and proximity of room boundaries – also apply to a centre channel and should be taken into account. The CIC and C3C are intended to be positioned relatively clear of room boundaries and centrally either just below or just above the screen. If the screen is either a plasma or projector type located close to the wall it may not be possible to position the CIC or C3C very far forward. In these cases, some adjustment of low frequency equalisation via the AV processor may be necessary to reduce excess bass. It is always preferable however to experiment with loudspeaker positioning before resorting to electronic equalisation. If the centre speaker is to be positioned away from the screen, either low down or high up, it should be angled up/down towards the listener. While every ATC centre channel speaker is effectively magnetically shielded, the extreme sensitivity of some CRT tubes to residual levels of magnetic flux may mean that, in rare cases, ATC centre channel speakers are not appropriate. Adjusting the relative front/back position of the centre speaker and the CRT can reduce magnetic interference but should your screen suffer intractable picture distortion caused by the proximity of a centre speaker contact your dealer or installer for advice.

### Subwoofer Placement

The subjective performance of any subwoofer will be fundamentally influenced by the acoustic character of the room in which it is used, and its position within the room. Speaker and subwoofer systems are most often installed in rooms which are comfortable to sit and talk in, and the typical mixture of carpets, curtains and soft furnishings help ensure that middle and high frequencies are reasonably well controlled. There may however be low frequency problems; either too much or too little bass.

To minimise these problems start with the subwoofer positioned away from walls and corners, avoiding the midpoint between any two parallel boundaries. If the balance is bass-light, the subwoofer can be moved towards the corner. Use the subwoofer controls (see Section 5) to optimise satellite integration and for fine tuning rather than to compensate for inappropriate positioning. All rooms vary and it is a good idea to experiment with both listening and speaker positions until a good compromise is reached.

The subwoofer should be placed in a position which allows adequate ventilation around the heat sink fins.

### Full Bandwidth Speaker Positioning

While each loudspeaker in an AV system should be located appropriately in its immediate acoustic environment, if an AV system is to reach its full potential the relative position of each loudspeaker element must be considered. In professional environments the relative position is important because it will fundamentally influence multichannel mix decisions, while in domestic systems correct positioning will offer the best chance of programme material being heard as intended.

The basic guidelines for positioning the five full bandwidth speakers of a 5.1 system are illustrated in **Fig I**. The elements of an AV system should follow this positioning guide as closely as possible. There is some latitude for compromise in the speaker to listener distance of a domestic installation as AV coders/processors provide facilities to adjust the delay time of all or some speaker channels. Professional installations however should adhere strictly to the recommendations of **Fig. I** and not use delay adjustment to compensate for alternative speaker to listener distances.

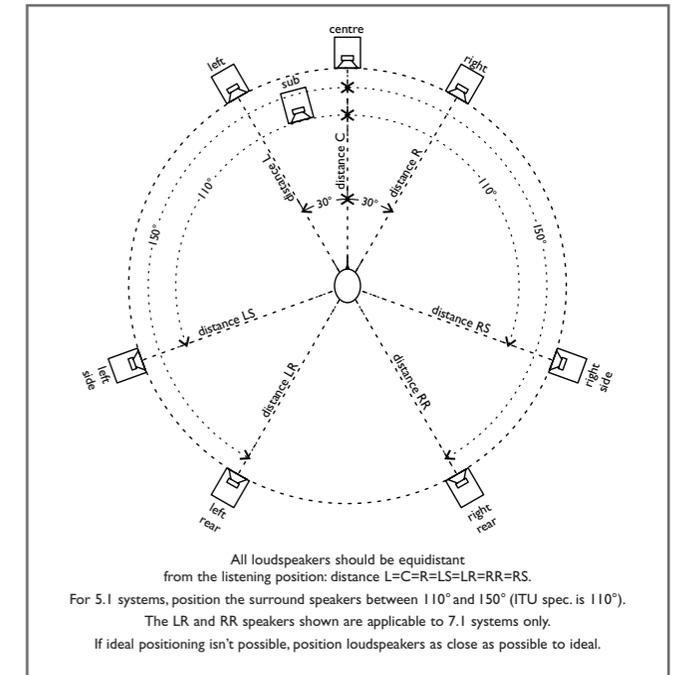


Fig. I  
Ideal Full Bandwidth Speaker Positioning of 5.1 and 7.1 systems

## 2 : Bass Management

### Bass Management in Domestic Systems

This section aims to clarify some of the issues surrounding the use of Bass Management (or bass redirection as it is sometimes known) in ATC multichannel systems. Topics discussed apply to the whole range of ATC systems and can be used for guidance when making installation decisions. Differences in professional and domestic requirements dictate slightly different approaches to Bass Management. In the recording studio, the primary aim is to achieve a result which will transport well to a range of domestic equipment and listening environments, whilst retaining the artistic intentions. These notes however focus on the needs of the domestic user which are rather more particular. The primary function of Bass Management in domestic applications (home theatre or multichannel audio only reproduction) is to increase the dynamic range, or the total sound pressure that can be delivered by the speaker system. However, depending on the performance of the loudspeakers in use, this priority may not be appropriate in some situations – this is commonly the case when using ATC loudspeakers. Switching off bass management in the majority of AV processors is simply a case of ensuring that the Sub-woofer output is turned “ON” and that all satellite speaker size options are set to “LARGE”.

The advent of multichannel reproduction technology in the home has led to the desire for inexpensive and robust speaker systems which can reproduce high sound pressure levels. Unfortunately the latter two requirements are in direct conflict with the former. Obviously, the simplest way of reducing the retail price of a product such as a loudspeaker is to cut back on the quality of the components used.

However, when designed properly, there is a direct relationship between the cost of a moving coil loudspeaker and its potential dynamic range. This can be attributed to a number of factors. For example, a drive-unit’s metal parts act as a sink for the heat generated by its voice coil, so as the mass of steel used is reduced for cost purposes, so the speaker’s ability to handle power is degraded. Magnet size and diaphragm area also tend to be reduced in an attempt to cut costs. Again, the trade-off is efficiency and dynamic range, both of which suffer as the compromises are made.

A convenient way of helping a low power system to deliver more sound pressure is to divert the potentially more damaging low frequencies away from the vulnerable speakers and into a sub-woofer. Bass management was devised to perform this task in the digital domain. It is a system of software filters and gain controls commonly fitted to AV processors/decoders that can redirect low frequencies away from the satellite speakers (left, centre, right, surround left and surround right in a 5.1 configuration) and route it to the dedicated low frequency channel. Because the processing is done in software it is virtually free of cost and thus attractive to those who wish to maximise the dynamic range of a modest speaker system.

### Compromises

As described earlier, Bass Management was devised for domestic use as a means of extracting more performance from cost-sensitive systems. However in high quality audio systems it should be avoided. The improvement in dynamic range that may be achieved with Bass Management is not without side effects and in high quality systems these side effects are significant.

The reasons for avoiding its use in high quality systems, such as ATC systems, are these:

- High quality systems have enough dynamic range and bass extension without the use of Bass Management. Less software processing of the source material implies less potential for undesirable artefacts.
- Without accurate knowledge of the acoustic character of satellite and subwoofer it is impossible for Bass Management to achieve a flat overall frequency response. Similarly the phase response will be unpredictable.
- Bass Management encourages the crossover frequency between subwoofer and satellites to be above the onset of directionality in the subwoofer output. The resulting ability to hear the location of the subwoofer is clearly to be avoided.
- When a significant proportion of the frequency range is separated from the satellites and passed to the subwoofer, any difference in the dynamic behaviour between the two types of loudspeaker will cause the system frequency response to change with output level.
- The addition of filter slopes to the existing roll-off shapes of the loudspeakers may incur time-domain ringing and audible colouration.

### Conclusion

There is a good argument for the use of Bass Management in modest, cost sensitive systems with restricted dynamic range. However, when applied to high quality systems the side effects are likely to be intrusive. We strongly recommend that Bass Management should not be used with ATC loudspeakers in domestic applications.

## 3 : Amplification

The choice of partnering amplifier for the C1C and C3C will have significant influence on the performance of the system. Consider the following when selecting the amplifier:

- With any passive loudspeaker there is a trade-off between low frequency extension and sensitivity. The C1C and C3C’s extended low frequency response means that their sensitivity is relatively low. It is advisable therefore to select an amplifier of relatively high power capabilities. Use of an under specified amplifier will result in distortion at high levels and may risk damage. Valve or solid state amplifiers with high output impedance should be auditioned carefully to establish that their characteristic reduced damping at low frequencies is acceptable.
- The exceptional distortion performance of the C1C and C3C combined with very wide dispersion will ruthlessly reveal deficiencies in ancillary equipment. It is advisable therefore to audition the C1C or C3C with your proposed amplifier and ancillary system.

## 4 : Connection

### C1C and C3C Centre Channels

The C1C and C3C are equipped with a “bi-wire” connection panel that enables separate amplification of the bass drivers and tweeter. Remove the linking bars between the two pairs of terminals if you wish to take advantage of the bi-wire facility. The terminals can accommodate either stripped cable ends or 4mm plugs. Always use good quality speaker cable with a 2.5mm<sup>2</sup> minimum cross sectional area per conductor (79 strand). Cable of a smaller cross sectional area or fewer strands is unsuitable. For cable runs longer than 10m use a significantly heavier gauge cable. Consult your dealer or consultant for specific cable recommendations.

Ensure that the positive and negative terminals on each connection panel are connected back to the corresponding positive and negative terminals on the amplifier.

### C1 Sub

The subwoofer is provided with both line level inputs via a pair of phono connectors and hi-level (speaker level) inputs on a pair of binding posts. Only one type of input should be used at any one time. The rear panel also features the mains power input, voltage selector, fuse, remote trigger input and standby indicator LED. The rear panel input connections are shown in **Fig. 2**:

#### Audio Input Options – C1 Sub

**Line Level Inputs:** These should be used to connect your subwoofer to preamp outputs or integrated amplifier preamp outputs. For stereo use, use both connections. In a 5.1 system, only connect to one input. Either left or right is fine and will give the same results.

**Hi-Level Inputs:** These should be used to connect your subwoofer directly to a stereo pair of speakers, either via the amplifier outputs or the loudspeaker input terminals themselves. Take care to maintain correct polarity throughout.

**Control Input:** The subwoofer is also provided with a trigger input on 3.5mm mini-jack so the subwoofer can be remotely powered up. The ‘tip’ pin of the mini jack should be connected to trigger signal and the ‘ring’ to ground.

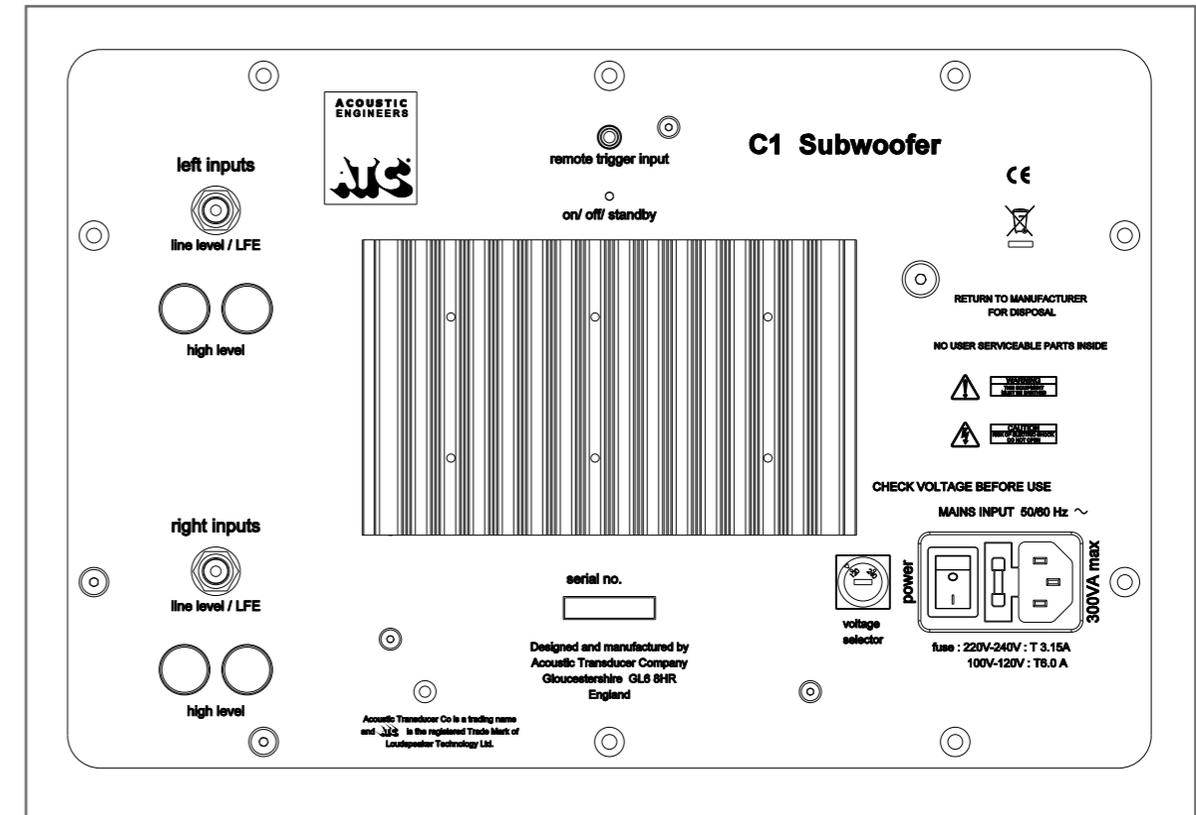


Fig. 2  
C1 Sub Amplifier Rear Panel

## 5 : Functions/Settings – CI Sub

All functions/settings on the CI Sub are controlled via a rotary encoder on the front display panel of the unit and shown in **Fig.3** or by the supplied IR remote control. Pushing the encoder knob cycles through the settings and turning the knob clockwise/anticlockwise increases/decreases the function value respectively. From the IR remote, Left/Right cycles through the settings and Up/Down increases/decreases the function value respectively.

**Overall input sensitivity** of the subwoofer can be set via the Rotary Encoder or IR remote control. Initially the level (shown by 'L' on the front display) should be set towards the centre of its range (50) and only adjusted once the upper filter cut-off frequency has been set.

**Filter Frequency** is shown by 'Fr' on the front display panel: Varies the upper low-pass crossover frequency. The filter frequency is the fundamental parameter that defines how the subwoofer integrates with the satellite/main loudspeakers. The filter frequency should be set at, or just above the cut-off frequency of the satellite/main loudspeakers. The recommended initial filter settings for the CI Sub when used with ATC satellite/main loudspeakers are shown below.

**Phase** is shown by 'Ph' on the front display panel: Changes the phase of the acoustic output signal with reference to the input signal. This can be used to improve the integration of the sub – satellite/main loudspeakers by correcting for phase

problems due to different distances from listener to sub and satellite/main loudspeakers. This can be set by listening to well known material and choosing the preferred setting or, by using a test tone. If using the test tone method, select a tone at, or very close to the sub-satellite crossover frequency and play it back through the sub and satellite loudspeakers. Flip the phase setting and listen to which gives the highest total output. Alternatively, a sound level meter could be used to measure the level.

**Display Brightness** is shown by 'Br' on the front panel display Varies the brightness of the front panel display, a higher number leading to a brighter display.

**Display On/Off** is shown by 'Sc' on the front panel display The following options are available from this menu:

- 0 The display stays lit all the time
- 1 The display stays lit all the time, at the users selected brightness level, and then automatically changes to minimum brightness after 30 seconds.
- 2 The display stays lit, at the users selected brightness setting for 30 seconds then turns off.

Recommended initial Sub Filter settings for partnering ATC Entry Series stereo loudspeaker models are as follows:

SCM7 – **60**; SCM11 – **56**; SCM19 – **54**; SCM40 – **48**.

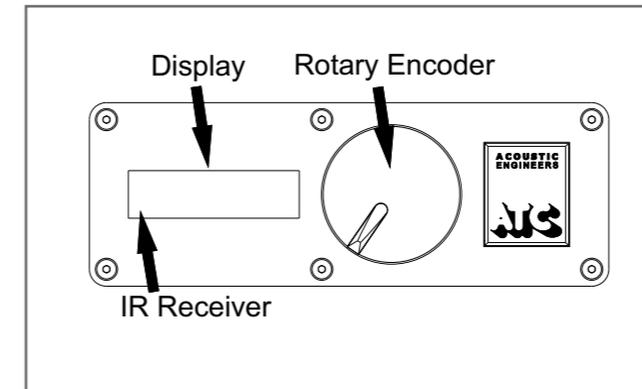


Fig. 3  
CI Sub Amplifier Front Display Panel

# Entry Series All models

1

Listening

2

Care & Maintenance

3

Specifications : Stereo/Satellite Models

4

Specifications : Multichannel Models

5

Warranty & Contact

## 1 : Listening

The ear and brain tend to interpret distorted sound as loudness and thus underestimate the actual level of undistorted sound. The Entry Series, like all ATC monitors, demonstrates very much lower levels of distortion than conventional systems of a similar size and it is therefore advisable to begin listening at an artificially low level and carefully increase the volume. It is also possible for your speakers to produce sufficient sound pressure levels for your ears themselves to become a source of distortion and make the sound appear harsh. Any audible distortion indicates that either the system or your ears are being over-loaded and the volume level should be reduced.

## 2 : Care & Maintenance

High technology material finishes are used in this product. The surfaces are durable and with a little care can be kept as good as new even under conditions of heavy use. Normally, a dry duster will be all that is required to keep the finishes clean. Heavy soiling can be cleaned using a cloth slightly moistened with a non-abrasive household cleaner.

There are no components within the speakers that can be considered expendable, or that would benefit from regular maintenance. There is no requirement for any kind of routine service work and there is no schedule for preventative maintenance. There are no user-replaceable parts within the speaker and, in the unfortunate event of any malfunction, repair should be referred to either the supplying dealer or consultant, the relevant importer, or ATC.

ATC has every confidence in the quality of each product that it manufactures.



### 3 : Specifications : Stereo/Satellite Models

#### SCM7

**Drivers** : HF ATC 25mm Neo Soft Dome, Mid/LF ATC 125mm SC **Matched Response** : +/- 0.5dB **Frequency Response (-6dB)** : 60Hz–22kHz  
**Dispersion** : ±80° Coherent Horizontal, ±10° Coherent Vertical **Sensitivity** : 84dB @ 1W @ 1metre **Max SPL** : 103dB  
**Recommended Power Amplifier** : 75 to 300 Watts **Nominal Impedance** : 8 Ohm **Crossover Frequency** : 2.5kHz  
**Connectors** : Binding Posts/4mm Plugs, bi-wire **Cabinet Dimensions (HxWxD)** : 300x173x215 (grill adds 28mm to depth) **Weight** : 7.5kg

#### SCM11

**Drivers** : HF ATC 25mm Neo Soft Dome, Mid/LF ATC 150mm CLD **Matched Response** : +/- 0.5dB **Frequency Response (-6dB)** : 56Hz–22kHz  
**Dispersion** : ±80° Coherent Horizontal, ±10° Coherent Vertical **Sensitivity** : 85dB @ 1W @ 1metre **Max SPL** : 108dB  
**Recommended Power Amplifier** : 75 to 300 Watts **Nominal Impedance** : 8 Ohm **Crossover Frequency** : 2.2kHz  
**Connectors** : Binding Posts/4mm Plugs, bi-wire **Cabinet Dimensions (HxWxD)** : 380x232x235mm (grill adds 28mm to depth) **Weight** : 10.9kg

#### SCM19

**Drivers** : HF ATC 25mm Neo Soft Dome, Mid/LF ATC 150mm Super Linear **Matched Response** : +/- 0.5dB **Frequency Response (-6dB)** : 54Hz–22kHz  
**Dispersion** : ±80° Coherent Horizontal, ±10° Coherent Vertical **Sensitivity** : 85dB @ 1W @ 1metre **Max SPL** : 108dB  
**Recommended Power Amplifier** : 75 to 300 Watts **Nominal Impedance** : 8 Ohm **Crossover Frequency** : 2.5kHz  
**Connectors** : Binding Posts/4mm Plugs, bi-wire **Cabinet Dimensions (HxWxD)** : 438x265x300mm (grill adds 34mm to depth) **Weight** : 17.8kg

#### SCM19A

**Drivers** : HF ATC 25mm dual suspension Tweeter, Mid/LF ATC 150mm SL **Matched Response** : +/- 0.5dB **Frequency Response (-6dB)** : 54Hz-22kHz  
**Dispersion** : ±80° Coherent Horizontal, ±10° Coherent Vertical **Max SPL** : 108dB **Crossover Frequency** : 2.5kHz **Connectors** : Male XLR  
**Input sensitivity** : 1V **Filters** : 2nd Order critically damped with phase compensation **Overload Protection** : Active FET momentary gain reduction  
**Fault Protection** : DC fault protection and thermal trip. Fault indication on rear panel mounted LED **Amplifier Output** : 150W LF, 32W HF  
**Cabinet Dimensions (HxWxD)** : 980x370x344mm (inc. foot plinth & amp, spikes add 25mm to height, grill adds 34mm to depth) **Weight** : 31kg

#### SCM40

**Drivers** : HF ATC 25mm Neo Soft Dome, Mid ATC 75mm Soft Dome, LF ATC 165mm SC **Matched Response** : +/- 0.5dB **Frequency Response (-6dB)** : 48Hz-22kHz  
**Dispersion** : ±80° Coherent Horizontal, ±10° Coherent Vertical **Sensitivity** : 85dB @ 1W @ 1metre **Max SPL** : 112dB  
**Recommended Power Amplifier** : 75 to 300 Watts **Nominal Impedance** : 8 Ohm **Crossover Frequencies** : 380Hz & 3.5kHz **Connectors** : Binding Posts/4mm Plugs, tri-wire  
**Cabinet Dimensions (HxWxD)** : 980x370x305mm (inc. foot plinth, spikes add 25mm to height, grill adds 34mm to depth) **Weight** : 31kg

#### SCM40A

**Drivers** : HF ATC 25mm dual suspension Tweeter, Mid 75mm ATC Soft Dome, LF ATC 164mm SC **Matched Response** : +/- 0.5dB **Frequency Response (-6dB)** : 48Hz–22kHz  
**Dispersion** : ±80° Coherent Horizontal, ±10° Coherent Vertical **Max SPL** : 112dB **Crossover Frequencies** : 380Hz & 3.5kHz **Connectors** : Male XLR  
**Input sensitivity** : 1V **Filters** : 4th Order critically damped with phase compensation **Overload Protection** : Active FET momentary gain reduction  
**Fault Protection** : DC fault protection and thermal trip. Fault indication on rear panel mounted LED **Amplifier Output** : 150W LF, 60W MF, 32W HF  
**Cabinet Dimensions (HxWxD)** : 980 x 370 x 344mm (inc. foot plinth and amplifier stand-offs. Spikes add 25mm to height, grill adds 34mm to depth) **Weight** : 36kg

### 4 : Specifications : Multichannel Models

#### C1C

**Drivers** : HF ATC 25mm Neodymium, Mid/LF 125mm **Matched Response** : +/- 0.5dB **Frequency Response (-6dB)** : 57Hz–22kHz  
**Max SPL** : 103dB **Sensitivity** : 86dB @ 1W @ 1metre **Nominal Impedance** : 8 Ohm **Recommended Power Amplifier** : 75 to 300 Watts  
**Crossover Frequency** : 2.5kHz **Cabinet Dimensions (HxWxD)** : 161x410x280mm (grill adds 28mm depth) **Weight** : 12kg

#### C3C

**Drivers** : HF ATC 25mm Neodymium, Mid/LF 150mm CLD **Matched Response** : +/- 0.5dB **Frequency Response (-6dB)** : 54Hz–22kHz  
**Max SPL** : 108dB **Sensitivity** : 88dB @ 1W @ 1metre **Nominal Impedance** : 8 Ohm **Recommended Power Amplifier** : 75 to 300 Watts  
**Crossover Frequency** : 2.2kHz **Cabinet Dimensions (HxWxD)** : 230x500x303mm (grill adds 28mm depth) **Weight** : 18kg

#### CI Sub

**Driver** : LF 12"/314mm **Frequency Response (-6dB)** : 18Hz–250Hz **Max SPL** : 109dB  
**Amplifier Output** : LF 200 Watts **Cabinet Dimensions (HxWxD)** : 461x360x360mm **Weight** : 24kg

## 5 : Warranty & Contact

All ATC products are guaranteed against any defect in materials or workmanship for a period of two years from the date of purchase.

Within this period we will supply replacement parts free of charge provided that the failure was not caused by misuse, accident or negligence.

Purchasers who complete and return the Warranty Card will have their warranty period extended up to a period of six years from the date of purchase.

This guarantee does not limit statutory rights.



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