



ET30 AFILS Amplifier



Features

- Upto 50m² Coverage
- 2 Inputs
- Phantom Power
- Current Mode Output
- Integrated PSU
- Soft Start
- Compressor
- Noise Limiter
- True Operation Indicator
- Protected Mix Control
- Protected Output Drive Control
- Power Indication
- 3A Peak Current Capability
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Description

The ET30 is part of Current Thinkings' *Easy T*™ range of audio frequency induction loop (AFILS) amplifiers. The unit is designed for user-friendly installation to walls, vanity panels, desks and counters. The unit is compact, the front is printed with the AFILS logo as well as text boxes to allow the name of the responsible person and their contact number to be written in. The controls (Mix and Drive) are recessed to hinder unauthorised adjustment, and LED indication is provided for the presence of power and loop current.

The amplifier has two inputs to accept microphones, other signal levels can be accommodated using the relevant Current Thinking adaptor. The inputs are mixed together and the balance between the two inputs is set with the mix control, this allows the unit to operate with a main microphone and an ambience microphone if required, or in a TV lounge to allow a scart connection to the television to be balanced with an ambience microphone for conversation.

The unit incorporates the latest design in audio processing allowing varying microphone levels to be compensated for automatically while preventing any sudden loud noises from reaching the output stage. The compressor design automatically adjusts the release time providing high quality music with a slow release and speech with a relatively fast release. The compressor ratio is dynamically variable and will automatically change from 1:1 to over 20:1 in the case of limiting. The unit also provides an automatic noise suppression system, reducing the level of audible hiss from the compressor as gain is added to the system.

The output stage for the ET30 incorporates a true constant current design, which will drive loop coils from 0.1Ω to 1Ω and is specifically designed for single turn loops in rooms. The output level is set using the drive control and is protected against over temperature; DC offset and has a soft start facility removing loud clicks and pops when the unit is turned on.

Applications

The following are a few examples of the uses for the ET30 AFILS amplifier, including the likely accessories required.

- Counters** Using the telecoil, with either the clip or desk microphone
- Interview Room** Using the telecoil on the desk, with the desk microphone
- Meeting Rooms** Using a loop cable and either desk or clip microphone (s)
- TV Lounges** Using a loop cable and Scart lead, with optional microphone
- Sheltered Housing** Using loop cable, clip microphone and doorbell interface

All information is believed to be correct at the time of printing, however Current Thinking Ltd reserve the right to change any specification as part of our programme of continuous improvement, E&OE.

Technical Specification

Inputs

- Audio inputs 2 off
- Type Microphone 3.5mm mono jack
- Phantom Yes, 4.5V 1mA
- Sensitivity -50dB

Mains Input

- Voltage 230V ~ 50/60 Hz
- Power 20VA Max
- Internal fuse 250mA F
- Plug top Fuse 5A
- Fuse for Spur 3A

Indication & Controls

- LED indicators 2 off, power and loop current
- User Controls Mix and current Drive.
- Protection Recessed screwdriver adjust only.

Audio Processing

- Compressor Variable ratio 1:1 to limit 20:1.
- Attack 10mS
- Release Automatic from 500mS to 1500mS
- Noise Reduction Yes, limits bandwidth to 8KHz at full gain, 16KHz at -6dB
- Dynamic Range >60dB
- THD <0.5%

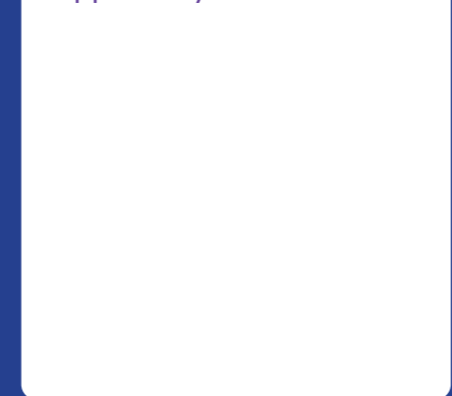
Output Stage

- Type Current Mode
- Loop impedance 0.1Ω to 1Ω
- Peak Current 3.5A Peak
- 125mS burst 3A Peak
- RMS Current 1.5A (@1KHz)
- Protection DC, Thermal, Short circuit, soft start.

Dimensions

- Extents Height 170mm
- Width 91mm
- Depth 33mm
- Weight Unit 860g
- Packed 1Kg including mains lead, mic, Sticker & packaging

Supplied By



Document number DET037001

Installation

The ET30 is designed to provide loop coverage for counters, desks and interview rooms, as well as larger areas up to 50m² *(see note 1 below).

To aid installation, a range of accessories are available including pre-made telecoils, loop cable, desk microphones, discrete clip microphones, scart adapters, 100V line adaptors and doorbell interfaces.

Installation is simplicity itself, the unit should be sited in a convenient place (ideally as close to the area to be covered as possible) the loop cable (a single turn loop of between 0.5mm and 1.5mm CSA cable) or telecoil is installed securely (see note 2 below) and the microphone(s) are located as close to the area(s) where the sound is to be picked up from (see note 3 below). Mains power can now be applied using the IEC cable supplied (this cable has a moulded plug fitted, which can be removed if direct wiring to a fused spur is required {the spur should be fused at 3A}), the output drive control and microphone mix controls can now be adjusted to the users preference. This is best done with a loop field strength meter during installation, or a loop listening device (good practice is to supply a loop listening device to all installations to allow the responsible person to test the loop periodically and record correct operation in a log booklet).

Notes:

- Loop coverage: the unit is rated at 30m² coverage for a square room (5.2m a side) where the loop cable is fitted at ceiling (2.4m) or skirting board level. If the room is rectangular the unit will cover 50m² (10m by 5m) with the cable at ceiling or floor level. If the floor contains a lot of steel (computer decking) or aluminium or the cable is placed at a higher level than 2.4m then the coverage will be reduced (approximately 20% per additional metre in height).
- If there is any doubt as to the construction of the building, it is always best to lay a temporary loop in the approximate position the final loop will occupy, this will determine the operation of the loop. Many new buildings contain aluminium in lost screed flooring, loops placed on the floor near this aluminium will fail to operate satisfactorily.
- Microphone cables must be run separately from the loop cable, under no circumstances should the cables be tied together for any distance, this will cause magnetic feedback and the unit will not perform correctly. Good practice is to twist the loop feeder cable together between the start and end of the loop and the amplifier. Current Thinking provide the telecoils with twisted feeder cables, and feeder cable is available in 5m and 10m lengths.

Products & ordering information

Basic Loop Amplifier

The basic kit comprises: ET30 AFILS amplifier, Mains Lead, Tie clip microphone and loop present sticker

Part Number ET30

Desk Microphone

This desk microphone has a fixed neck, and is designed to fit through desks from 10mm to 40mm thick.

Part Number ETDM

Tie Clip Microphone

This is a low cost microphone supplied with a removable self adhesive clip to allow easy fixing to windows, televisions etc.

Part Number ETCM

Scart Adapter

This lead plugs directly into the scart socket on the rear of televisions and video recorders giving clear sound regardless of the TV volume.

Part Number ETSL

Doorbell Interface

This adapter enables a door-bell or other DC voltage between 4 and 24 volts to activate a chime sound from the loop amplifier.

Part Number ETDI

100V Line Interface

This adapter allows the audio from public address amplifier speaker circuits to be used to feed the ET30 loop amplifier.

Part Number ETHV

Loop Present Sticker

This sticker is designed to show to potential loop users that an AFILS is fitted. The sign is matt with white international AFILS logo on a dark blue background.

Part Number ETLP

Feeder Cable

This is a four core twisted feeder cable (1mm CSA) to reduce the radiated field from the cable linking the loop amplifier to the start of the loop coil, supplied in 5 or 10 metre coils.

Part Number ETFD 5/10

Telecoil

This coil allows quick and easy fitting of the ET30 to desks and counters, supplied with 1m of twisted feed cable and self adhesive clips for mounting the coil.

Part Number ETTT



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