



## 500C Features

**Congratulations!** You've purchased a 500C 500 Series compressor!

The BAE 500C compressor is a 500 Series compatible FET style audio compressor/limiter inspired by the venerable 1176. It features ultra fast attack time with controls for attack and release, “fixed” threshold, Input/ Output controls and an array of useful compression ratios allowing it to be useful in a broad variety of musical situations. It uses BAE's proprietary discreet opamps and output transformer to deliver a transparent and warm sound. The 500C is housed in a sturdy, all metal full enclosure for shielding. Carefully crafted with the finest components.

### Controls

#### Input:

Controls the amount of signal fed from the input buffer to the gain reduction circuit. Increasing the input level control brings the signal closer to the threshold of gain reduction.

#### Output:

Controls the amount of signal fed from the gain reduction circuit to the output stage. Use this control as necessary to make up any gain lost during reduction.

#### GR Meter:

Indicates the amount of gain reduction applied to input signal. The green LED remains on with no input signal. The Red peak LED is illuminated when the input signal exceeds the clip point of the circuit. It is normal for the meter LEDs to be off when ABI is selected with the ratio control.

#### Attack:

Controls how quickly the compressor's gain reduction reacts to changes in the input signal level. Rotate the control counterclockwise for slower attack, clockwise for a faster attack.

#### Release:

Controls how quickly the gain reduction is returned to zero reduction. Rotate the control counterclockwise for slower release, clockwise for a faster release.

#### Bypass:

Engages the hard bypass relay effectively connecting the input to the output.



## Controls (Continued)

### Side Chain High Pass Filter:

Engages a 6dB per octave high pass filter at approximately 125Hz to reduce the effect of low frequency signals on compressor operation.

### Gain Reduction On/Off:

Engages or disengages the control signal to the gain reduction circuit effectively enabling or disabling gain reduction.



### Ratio:

Selects the gain reduction ratio 2:1, 4:1, 8:1, 12:1 20:1, ABI (“All Buttons In” or “British Mode”). The ratio setting determines the rate or severity of reduction applied to the input signal. Ex: Selecting a 4:1 ratio allows a 4dB increase in input level with only a 1dB increase in output.



### Meter Adjustment:

From time to time it may become necessary to adjust the meter. If it is observed that LEDs other than the green LED are on when no signal is present (and thus no gain reduction) the meter circuit can be adjusted through an access hole on the faceplate just about above the Ratio control (see figure below). With no signal to the unit and with the Input control fully counterclockwise, use a small jeweler’s screwdriver or other appropriate tool to make slight adjustments to the trim pot through the access hole.



Note: only slight adjustments will be necessary, and should be made slowly, allowing the meter to settle between adjustments.. If the meter cannot be satisfactorily adjusted, it may be necessary to send the unit to the factory for a full calibration. **Contact BAE for service.**

## 500C Installation and Specifications



### 500 Series Installation:

Follow the instructions provided by the manufacturer of your 500 series rack and power supply to install your 500C. Make sure that the card is firmly seated in the slot and fully screw the installation screws into the 500 series rack enclosure. Your input and output connections will be provided on the rear of the rack enclosure either as XLR connectors or part of a DSUB 25 array.

#### Specifications:

##### Max Input Before Clip:

+27dBu

##### Noise:

-82dB (+4dBu input, 1KHz, A-weighted, GR off)

##### THD+N:

0.15% (+4dBu input, 1KHz, A-weighted, GR off)

##### Frequency Response:

+0.3dB / -0dB (10-22KHz)

##### SC HPF:

6dB/octave @ 125Hz

Current Draw: Approx 120mA/Rail

FET gain reduction | Three 2520 style opamps | Transformer coupled output | Feedback style peak limiter | SC HPF | Hard bypass | Gain Reduction on/off | Comp ratios: 2:1, 4:1, 8:1, 12:1, 20:1 | ABI | Fully enclosed | High quality components throughout

# RECALL SHEET

## NOTES

