

AUTO Q

The Auto Q is an automatic tape cueing device which has been designed to work in conjunction with our "66" Mk II, "77" Mk II and Mk III Tape Recorders.

The Principle of Operation is as follows:

1. A low level 30 c/s pilot tone is recorded behind all programme material.
2. At the desired cue stop points the pilot tone is broken for a period of $\frac{1}{2}$ second.
3. On replay, the pilot tone is amplified by a frequency selective amplifier, the output of which operates a relay.
4. When the pilot tone ceases during replay, the relay drops out and in so doing pulses a second relay which stops the recorder.

The cue stop pulse may be placed on the tape in any of the following three ways:-

1. A cue pulse may be placed at the end of each section of recorded programme by momentarily pressing the cue button.
2. A cue pulse may be placed at the end of each section of recorded programme by momentarily pressing the cue button. After the pulse has been placed on the tape the recorder will automatically stop.
3. A cue pulse may be placed at the beginning of each section of the recorded programme by momentarily pressing the cue button immediately after the recorder has started recording.

Operating Instructions

1. Plug the Auto Q into the mains.
2. Connect the 600 ohm line input on the recorder to PROG. OUT on the RECORD side of the Auto Q, and the 600 ohm output of the recorder to PROG. IN on the REPLAY side of the Auto Q. The input programme to be recorded can then be fed into the RECORD PROG. IN jacks on the Auto Q, and the programme replayed from the REPLAY PROG. OUT jacks. If it is undesirable to have leads plugged into the front of the panels as described above, the connections to the Auto Q may be made via a barrier strip on the back of the unit.

Operating Instructions (contd..)

3. Switch on the Auto Q and the recorder.

TO RECORD

4. Firstly, set the record gain control to the correct recording level.
5. With a 600 ohm line load connected to the RECORD PROG. IN jacks adjust the tone amplitude adjustment on the Auto Q until the tone level reads -20 db below normal programme level on the V.U. meter.
6. Switch the selector switch to the desired record position. In either of these positions the "Start" button will set the recorder in its recording mode. Whenever a stopping cue point is desired on the tape, the cue button is pressed (the pulse length is independent of the time for which the button is held in) and depending on the selector switch position, the recorder will either continue after the pulse is recorded or it will stop.

TO REPLAY

7. Set the replay gain to the setting necessary to replay the programme at normal programme level.
8. When the operator wishes to replay either an uncued tape or a cued tape without it stopping, the selector switch should be set in the Normal Tape Replay Position. In both the replay positions, the "Start" button sets the recorder in its replay mode.
9. When the cue pulses are required to stop the recorder, the selector switch must be set in the Cued Tape Replay position and the METER/600 ohm switch on the recorder on PLAY. When the start button is pushed, the recorder begins replaying and continues to do so until a cue pulse stops it.

NOTE

1. The "Start" and "Cue" buttons are brought out to the barrier strip on the back of the Auto Q for remote control.
2. The push buttons on the recorder maintain their normal functions irrespective of the position of the Auto Q selector switch.

NOTE (contd..)

3. When spooling on "77" Mk II and Mk III Recorders the METER/600 ohm switch should be turned off and when spooling on a "66" Recorder the selector switch on the Auto Q should be turned to any position except the Cued Tape Replay position, otherwise the recorder may stop.

SPECIFICATIONS OF AUTO QPilot Tone

30 c/s \pm 10% Maximum level across a 600 ohm line is -2 dbm (-10 db on the V.U. meter). Impedance of the Auto Q across the input line is 5000 ohms.

Pilot Tone Filter

Drops the tone a further 18 db below its replay level, i.e. 48 db below peak programme level. Impedance of the Auto Q across the output line is 10000 ohms.

Unit

Fully transistorized (6 transistors).

Supply

15V D.C. regulated by a Zener diode and obtained from the 240V A.C. mains. Power consumption is 1 watt.

Connections

Standard twin jacks, also connected to the barrier strip at the back of the unit. The "Cue" and "Start" buttons are connected to the barrier strip to facilitate remote control of the Auto Q.

Note: The "Cue" button may be operated only once in any eight second period.

Size

19" wide x 3 $\frac{1}{2}$ " high x 5 $\frac{1}{4}$ " deep - Suitable for standard rack mounting.