

BOOM BOX

In the Weight Drop Controller Mode

Operating Manual

Weight Drop Controller Mode System Description

Weight Drop Controller Mode

One Boom Box unit is connected to the Weight Drop unit and one unit is connected to the Recording system. A radio system is connected to both units for communication.

The Boom Boxes connected to the Weight Drop unit and to the Recording system both need to be in the Weight Drop Mode.

When the operator activates the switch on the Weight Drop unit to ON or MOMENTARY, this will trigger the Boom Box that the fire process has started. The Boom Box will send a Ready Message over the radio at 100 milliseconds plus the Start Delay after the switch closure. The Boom Box at the recorder will receive the Ready Message and will issue a pre-start pulse on the Recorder Start line. The Boom Box at the recorder will also send a serial message containing the ID and GPS position information of the Boom Box at the Weight Drop unit. This information can be used for identification of the hit that is about to happen.

The Boom Box at the Weight Drop unit will turn the radio transmitter off according to the PTT Delay entry before transmitting the 2500 Hz warning tone. The 2500 Hz tone will continue until the HIT signal is detected on the ISO START input to the Boom Box. Once the HIT signal is detected, the Boom Box will transmit the HIT message to the Boom Box at the recorder. In response to the received HIT message, the Boom Box at the recorder will issue a TIME BREAK pulse to the recording system. The TIME BREAK PULSE will be issued at 13.6 milliseconds after the detection of the HIT signal at the Weight Drop unit.

Weight Drop Mode – Automatic:

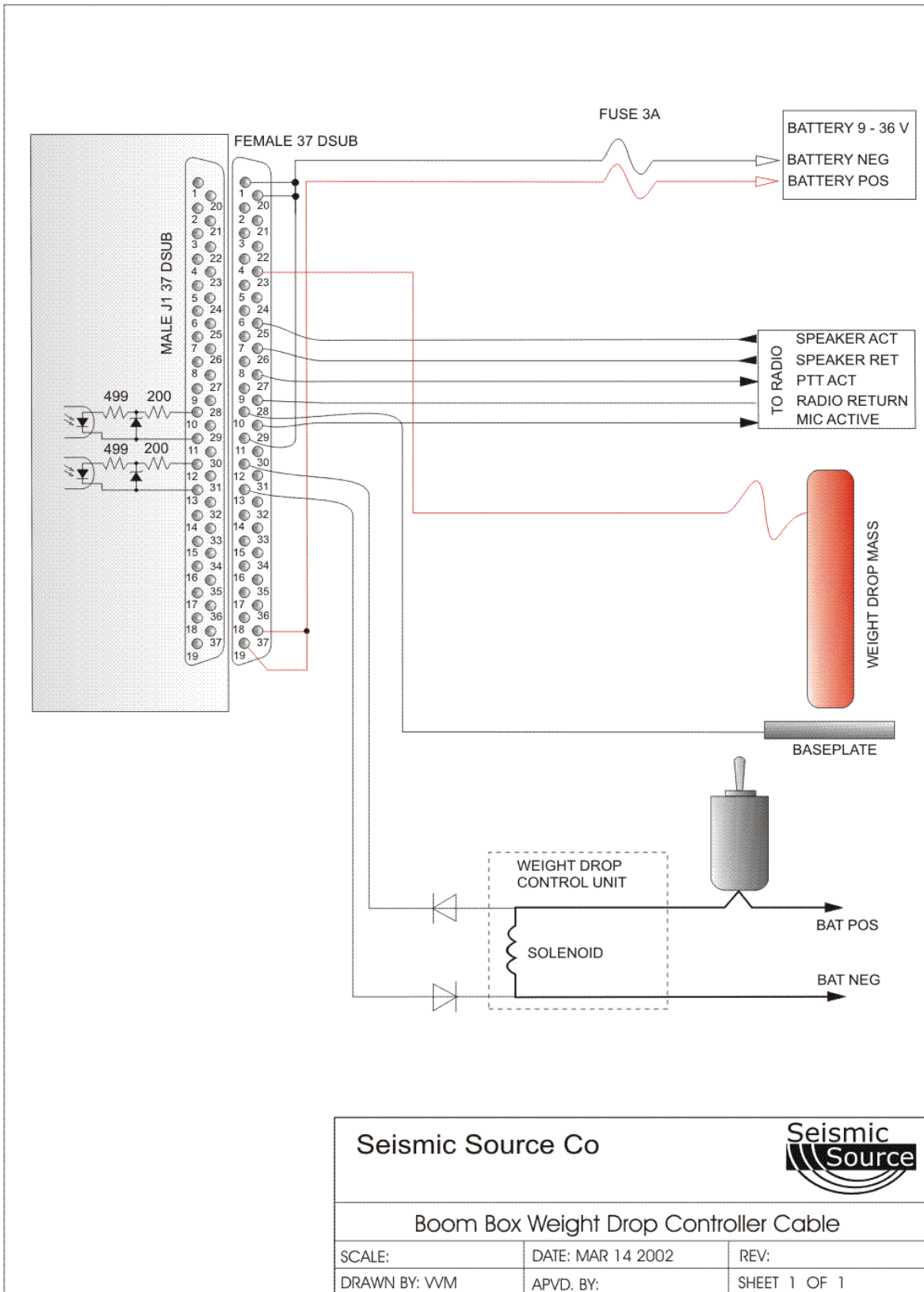
If the HIT signal was detected, the Boom Box at the Weight Drop unit will send the HIT message to the Boom Box at the Recorder. Then the Boom Box at the Weight Drop unit will wait the entered cycle time and then will automatically restart the process again.

If the Boom Box at the Weight Drop unit does not detect the HIT signal, the 2500 Hz tone is stopped after the amount of time in the Time Out entry has elapsed. The Boom Box will then wait until it detects another trigger signal from the Weight Drop unit ON or MOMENTARY switch to start the process over.

Weight Drop Mode – Manual:

If the HIT signal was detected, the Boom Box at the Weight Drop unit will send the HIT message to the Boom Box at the Recorder. The Boom Box unit will then wait until it detects another trigger signal from the Weight Drop unit ON or MOMENTARY switch to start the process over.

See Pocket PC Weight Drop Mode for setting up the Boom Box for the Weight Drop mode. Below are the connections to the Weight Drop unit and the Recording system. The Weight Drop timing diagram follows the connection diagrams.

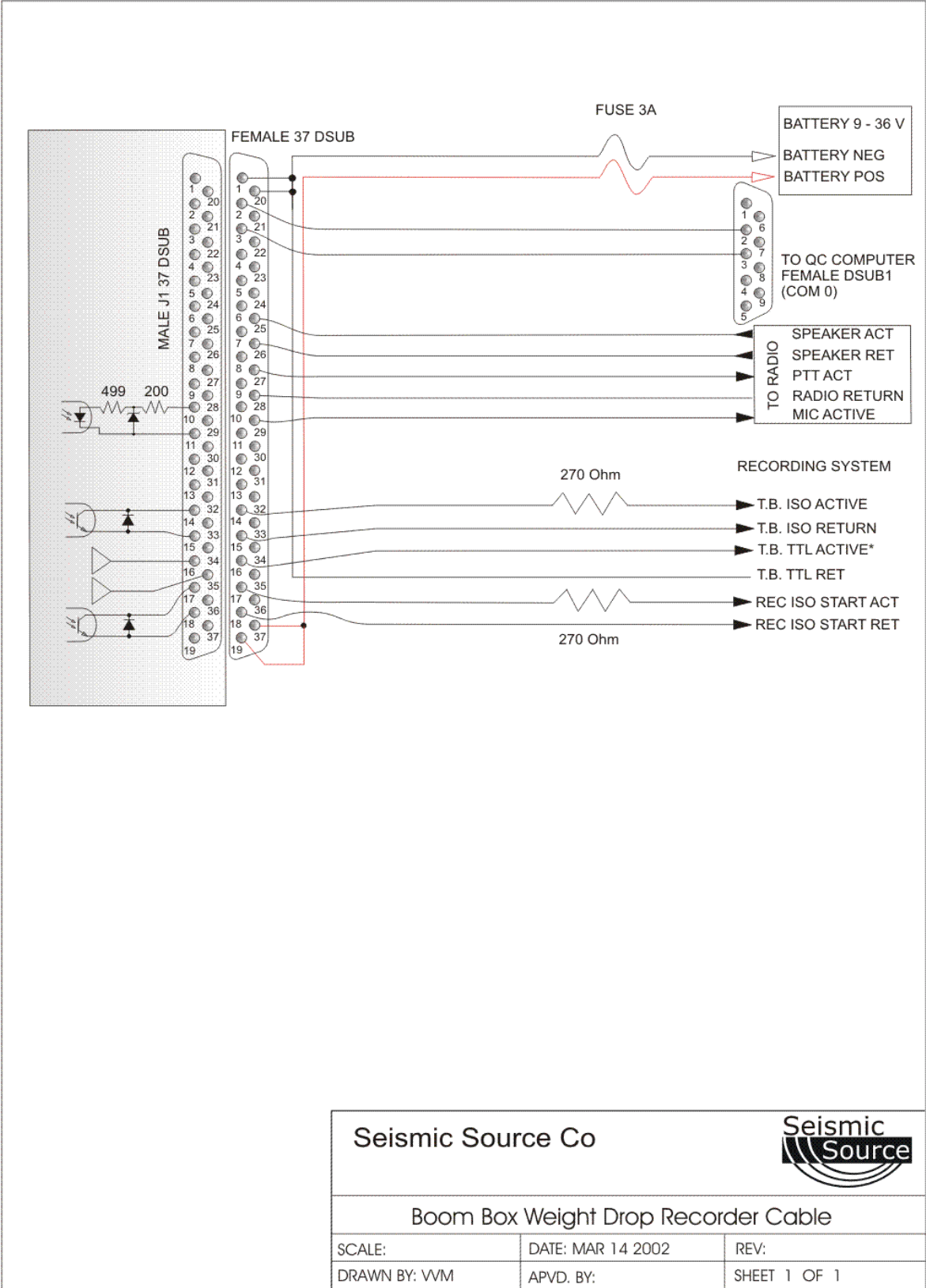


Seismic Source Co



Boom Box Weight Drop Controller Cable

SCALE:	DATE: MAR 14 2002	REV:
DRAWN BY: WMM	APVD. BY:	SHEET 1 OF 1



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Boom Box Weight Drop Recorder Cable

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