



# QA-45/40M quick start

## QA-45 and 40M Startup

1. Switch **ON** the unit (power switch located on the front panel) and the following screen will be displayed within 3 seconds.

----- STATUS -----		----- RESULT -----	
Wave	: off	Energy	: 0.0 JOULES
Ampl.	:	Peak U	: 0.0 VOLTS
Load	: 50 OHMS	Peak I	: 0.0 AMPS
Oper.	: LOCAL	Delay	: MS
ECG WAVE	ADV. ALG.	CHARGE TIME	PRINT HEADER
			more-2
F1	F2	F3	F4
			F5

2. Set the range switch located on the front panel to **HIGH**. (**LOW** for discharge energy less than 50 Joule. **PACE** for testing transcutaneous pacing.)
3. When testing of defibrillators in synchronized cardioversion mode, press **ECG WAVE (F1)**. Choose desired wave by pressing **UP (F2)** or **DOWN (F3)**. Select ECG by pressing **F4**.
4. The QA-45 can test defibrillators using defibrillator paddles or defibrillation and pacing electrode sets.

### IMPORTANT

For testing purposes, defibrillator electrodes should terminate with banana plugs, which are plugged into the center of the defibrillator/paddle contact plates on the front of the QA-45.

Metron recommends the use of the defibrillator contact shields supplied with the unit and a sheathed banana plug to minimize the risk of inadvertent electric shock.

Metron supplies a number of defibrillation and pacing test leads for use with the QA-40M and QA-45.

## QA-45 and 40M Defibrillator Testing

### Energy test

1. Securely place the defibrillator paddles or defibrillator test leads onto the QA-45 contact plates, and discharge the defibrillator.
2. QA-45 calculates the energy delivered over the load resistance and displays the result in joules under **RESULT**. See below:

----- STATUS -----		----- RESULT -----	
Wave	: off	Energy	: 0.0 JOULES
Ampl.	:	Peak U	: 0.0 VOLTS
Load	: 50 OHMS	Peak I	: 0.0 AMPS
Oper.	: LOCAL	Delay	: MS
ECG WAVE	ADV. ALG.	CHARGE TIME	PRINT HEADER
			more-2
F1	F2	F3	F4
			F5

### Cardioversion Test

1. Set the defibrillator to synchronized cardioversion mode. Securely place the defibrillator paddles or defibrillation test leads onto the QA-45 contact plates, and discharge the defibrillator.
2. QA-45 measures the time delay in milliseconds (ms) between the top of the 'R' wave and the discharging of the defibrillator pulse. This delay will be shown in the LCD display as: 'Delay: xxx ms'. QA-45 also shows the energy measured, the maximum voltage and the maximum current in the energy wave.

### CAUTION

Do not defibrillate into the ECG outputs or Pacer Inputs, as it can damage the QA-45.

### NOTE

This quick start does not cover QA-45 transcutaneous pacer mode testing. Refer to the QA-45 User & Service Manual.

