

# NC-15 DESK-TOP CHARGER/DC ADAPTER FOR FNB-3 AND FNB-4 NI-CD BATTERY PACKS AND MATCHING TRANSCEIVERS

The NC-15 is an attractive desk-top unit that provides charging current for the FNB-3 and FNB-4 standard- and extended-duty Ni-Cd battery packs, as well as regulated voltage for operating the transceiver (FT-203R or similar) while the battery pack is being charged. The NC-15 requires connection to a standard AC wall outlet, and includes both quick and trickle charging rates with automatic selection of the required rate determined by the condition of the battery pack.

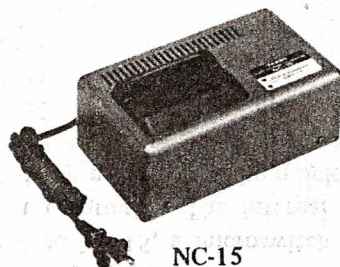
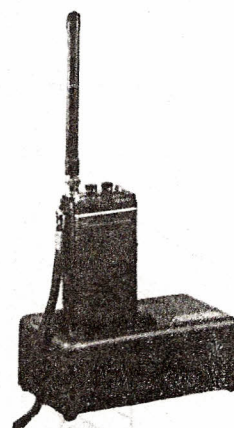
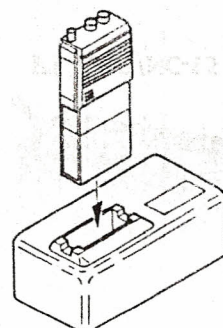
The transceiver may be operated while coupled to the battery pack being charged, in which case the MH-12A2B Speaker/Mic or YH-1 Headset is recommended to allow convenient transmitting. Charging of the battery is not prolonged by transceiver operation from the NC-15, but of course the battery pack may be disconnected from the transceiver and charged separately, if desired.

The NC-15 does not require any manual switching. When the battery pack is inserted into the receptacle on the NC-15, a microswitch activates the charger automatically. The internal temperature of the battery pack causes the quick charging system to be activated if below 45°C, in which case the green QUICK CHARGE indicator will light. When the internal temperature of the battery pack reaches 45°C, which occurs when fully charged, the green indicator will turn off and the NC-15 will shift to the trickle charge mode, providing just enough charging current to keep the battery pack fully charged. The red DC ADAPTER indicator will be lit whenever the NC-15 is activated. Removing the battery pack from the NC-15 will deactivate it automatically.

## Operating Information

The NC-15 is designed for use only with the Yaesu FNB-3 and FNB-4 Ni-Cd battery packs. It will not function with the FBA-5 battery case, and may be damaged if used with other types of battery packs.

The battery pack must be inserted into the NC-15 in the proper direction, as shown in the photograph below (when properly inserted, the red indicator on the NC-15 will be lit). A completely discharged FNB-3 will require about one hour of quick charging for a full recharge, while the FNB-4 will require about an hour and a half, at which time the green LED will be extinguished automatically. These charging times assume an ambient air temperature of 25°C (77°F), and will be longer for lower temperatures, or shorter for higher temperatures or packs that are not completely discharged.



NC-15

FT-203R/NC-15

**YAESU MUSEN CO., LTD.**

C.P.O. BOX 1500  
TOKYO, JAPAN

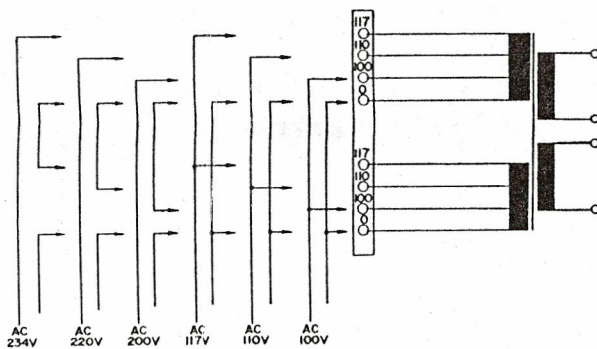
Whenever charging the battery pack without the transceiver attached, use caution to avoid any metal objects short-circuiting the exposed terminals on top of the battery pack.

Once a pack has been charged and the QUICK CHARGE indicator turns off, allow five seconds after removing the charged pack (for the NC-15 to reset the charging circuit) before inserting another battery pack.

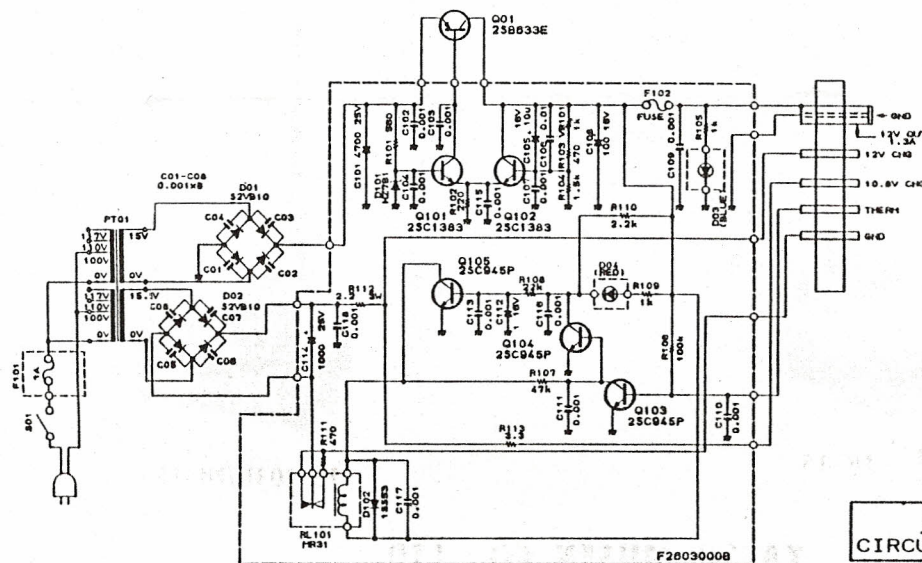
Note that the NC-15 is switched off automatically whenever the battery pack is removed from the charger. Also, if the pack is not installed correctly, the charger will not turn on (green indicator will not light).

**WARNING**

OUR WARRANTY DOES NOT COVER DAMAGE CAUSED BY IMPROPER SUPPLY VOLTAGE NOR USE OF AN IMPROPER FUSE.



POWER TRANSFORMER PRIMARY CONNECTIONS



**NC-15  
CIRCUIT DIAGRAM**

## Specifications

### Input voltage:

100/110/117/200/220/234 VAC, 50/60 Hz

### Battery packs:

Yaesu FNB-3, FNB-4 Ni-Cd packs, with or without transceiver

### Charge control:

Thermal switch inside battery pack (45°C)

### Charging times:

1 hr. for FNB-3 at 25°C ambient, quick mode

1.5 hr. for FNB-4 at 25°C ambient, quick mode

(trickle mode can be used at any time to prevent self-discharge when the pack is not in use)

### Charging current:

FNB-3 – approx. 630 mA quick,  
20 mA trickle

FNB-4 – approx. 650 mA quick,  
20 mA trickle

### Operating temperature range:

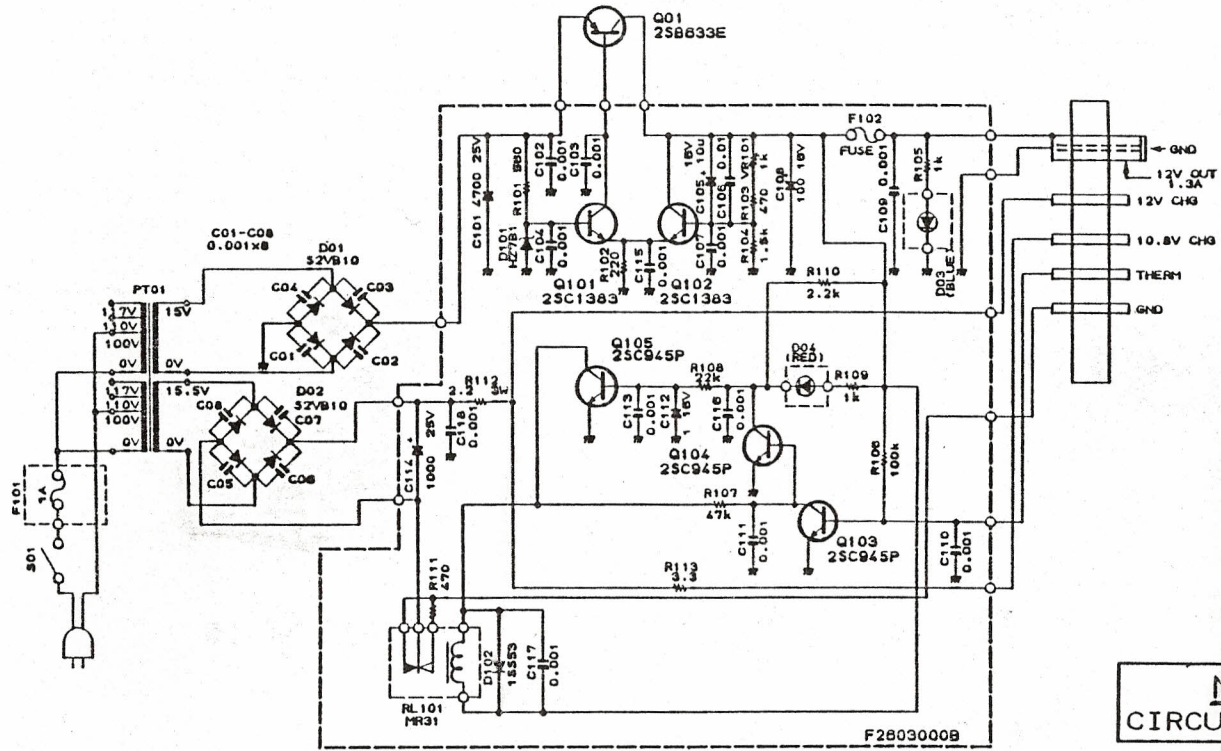
10° to 40°C (50° to 104°F)

### AC Adapter output voltage:

12.0 ± 0.3 VDC

### AC Adapter output current:

1.3A max.



NC-15  
CIRCUIT DIAGRAM

E6510184(8401-G)