BN-1 Communications Robot Guide:

**Basic Care & Set Up:**

Use the supplied battery packs only. Loosen screws for the battery compartment door as shown on page 7. Attach connectors and place in battery location. Be careful with wires while replacing cover. Replace and tighten.

**Recharging:**

Remove the power plug cover on the right side of BN-1 & attach power adaptor & then plug into power source. Recharge time is 8 hours for full charge from empty status. Do not overcharge. Usage time is 1 hour approximately. BN-1 will provide an audio indicator when charging is complete. Detach adaptor from wall first & then from BN-1 and replace power plug cover.

**When To Recharge:**

BN-1?s eyes will have Battery shaped indicator showing battery status. Partial, full & empty status is visible at certain times see page 7. Recharge as needed.

**Reset Switch:**

Depress reset switch to clear BN-1 memory & restore initial settings. Used upon first use, or any time that BN-1 requires resetting. Reset hole is next (right side) to the power button use a pointed dull object.

**IO Swing:**

Paw shaped remote control. Indicator light and 4 buttons. Batteries are included. Pull plastic tab to back to activate unit. Depress a button to activate. Light indicates operation. Strap is included to prevent loss.

**Operational Range:**

For the infrared remote is approximately 1.5 meters. Line of sight is needed between BN-1?s face and the remote.
Channel Selection:
Remote & BN-1 Must be set for the same channel of communication default should be 0. Adjust only if not working.
Different channels are used for multiple BN-1's to be used in the same room. (so only the owner can communicate with his robot)
Press the circle & heart buttons for 2 seconds until the indicator light flashes. Depress the heart button the number of times to change the channel to the desired channel. (up to 15 additional channels are available 0-15 a total of 16. Confirm selection.

BN-1 Channel Selector:
Make sure BN-1 is powered off. Open (coin) latched cover on BN-1 underside. Carefully use + shaped screwdriver to move selector switch. 0-9 and a-f are available. See chart on page 13 for proper selection of channel. Close latch cover.

Operational Testing:
Turn BN-1 on & place on floor within 1.5 meters. Hold heart shape button on remote for up to 10 seconds. Robot should react to the remote. If not recheck channel selection & retry.

General Meanings:
O button- Mode confirm, positive response to BN-1.
X button- Back/Previous, or negative response to BN-1
Star button- Mode Select, Next forward mode, dances, various use.
Heart button- Special-Come here.

BN-1 Pet Sensors:
Back sensor & Chin sensors- react to stroking as with real cats. There are emitting & detecting sensors, no real switch. Simply stroke BN-1. Multiple strokes (5 or more) indicate approval with eye expressions and kneading.
The motion sensors- in front of the eyes act the same way. BN-1 understands up, down, left, right motions individually.
The motion right, you should move your hand from left to right about 0-20 cm away from BN-1?s face, pull back your hand & repeat from the left to the right motion. If you do not pull your hand back, it will look like left-right, right-left left-right motion and will confuse him. These sensors may not function in early stages, if BN-1 is lying down or upside down or if he?s just not in the mood.

Alternate Modes:
There are 2 each; remote, game, & programming modes, plus a Motion Editor & a Program Run mode. There is a separate automatic regular that is default (BN-1 returns to this mode if not attended to within 30 seconds when in the alternate modes). In certain alternate modes BN-1 may not react to sensory input as normal, just as BN-1 does when in an uncooperative mood.
To enter the alternate modes push & hold the STAR button on the remote immediately after turning on BN-1. This will put the robot into the alternate mode with R1 Display in the eyes. Move forward through the list with the STAR button & back with the X button. Confirm with the O button.
The alternate modes are cycled through in the following order: R1, R2, G1, G2, P1, ME & RN Not required to hold any button for access or selection of this area.

Petting The Paw & Clapping:
Clapping can be 1, 2, 3 claps (claps should be sharp & quick). Petting the paw is done by pushing the paw toward the backwards.
Icons located on pg 17 shown in order left to right: scared, love you, happy, sad, mad, & hungry. These occur for various reasons to express the robot?s mood or state. Watch BN-1?s Eyes.

R1 & R2 Mode:
The button layout is (left picture on pg 18)
O button is Left,
X- Front,
Star- Right
Heart- is the emotion mode/edit mode actions or paw up if not previously programmed.
The right picture has the heart- come to you mode, in this mode BN-1 will avoid obstacles while it comes to you.
In any alternate mode, the robot returns to regular mode after 30 seconds of no input.
**Alternate Modes:**

G1= Roulette Horoscope uses the cat?s paw. The eyes display images rotating images:

Heart= very good,
Diamond= good,
Clover= not good,
Spade= bad.
Push hand to stop.

G2= Gesture Training (for you) Upon selecting this mode, BN-1 will show arrows in a certain direction. You are to motion the correct way to BN-1. Motioning sensors requires the hand to be just in front of the face. (Directional motion/pull away method previously mentioned.

P1= Allows you to control BN-1 with the remote or motion gestures.

**REMOTE CONTROL:**
O- turn around,
X- cat punch,
STAR- play dead,
HEART- love pose.
MOTION GESTURES: Right-bow, Left- bow left, Up- stand up, Down- deep bow.

P2= Preprogrammed reactions:

**Remote Buttons:**
O- partial motion edit move-default give left paw (raise left paw)
X- BN-1 will clap in a 3-3-7 cheer sequence,
STAR- BN-1 Exercises,
HEART- BN-1 Folk dance
MOTION GESTURES: Right-
Give right paw,
Left- give left paw
Up- Go away,
Down- Come here.

**Me-Motion Edit:**

When in this mode, BN-1 will be like a puppet and store the motions you perform. When a part of BN-1 is moved, you confirm with the O button on the remote. The acceptance of the command is confirmed with YES in the Eye Panels. There can be up to 63 steps. Once complete, the program can be played or erased. Erased is for entire program only, not individual steps.

O button- Memorize,
X button- Erase all,
STAR button - Play

In R1 mode (heart button) or P2 mode (O button) may trigger some parts of the programmed motions recorded in ME mode, thus making your BN-1 unique. If BN-1 needs to have the Memory Cleared- Restore factory settings. Press & hold the power button for 5 seconds (Chime) then release.

General Memory Loss may occur in one year without usage.
General Memory Loss cannot be replaced.
Continual periodic play should avoid this.